

SOUTHERN TEXTILE BULLETIN

VOL. X

CHARLOTTE, N. C., JANUARY 6, 1916

NUMBER 19

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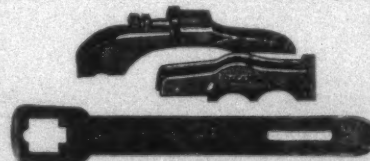
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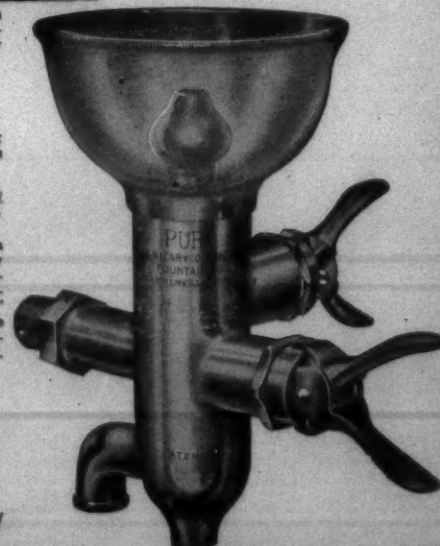
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SOUTHERN TEXTILE BULLETIN

VOLUME X

CHARLOTTE, N. C., JANUARY 6, 1916

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Clark's Annual Spindle Increase List

The following is a detailed list of the mills that have made an increase in their spindleage during 1915. The figures do not include machinery purchased to replace old machinery:

Alabama.

Russell Manufacturing Company, Alexander City.....	912
Fulton Cotton Mills, Athens.....	1,000
Fairfax Mill, Fairfax.....	25,000
Cherry Cotton Mills, Florence.....	2,500
Montala Manufacturing Co., Montgomery.....	496
Pell City Manufacturing Co., Pell City.....	500
Coosa Manufacturing Co., Piedmont.....	10,368
Marblé City Mills, Sylacauga.....	1,020
Total	41,796

Arkansas.

None.

Georgia.

Albany Cotton Mills, Albany.....	448
Mandeville Mills, Carrollton.....	2,640
Crystal Springs Bleachery Co., Chickamauga.....	840
Bibb Manufacturing Co., Columbus.....	19,000
Hamburger Cotton Mills, Columbus.....	3,840
Muscogee Mfg. Co., Columbus.....	1,000
Perkins Hosiery Mills, Columbus.....	1,200
Crown Cotton Mills, Dalton.....	15,000
Eastman Cotton Mills, Eastman.....	840
Ensign Cotton Mills, Forsyth.....	6,000
Kincaid Mfg. Co., Griffin.....	9,000
Hogansville Mfg. Co., Hogansville.....	5,000
Hillside Cotton Mills, LaGrange.....	20,304
Newnan Cotton Mills, Newnan.....	3,000
Anchor Duck Mills, Rome.....	1,316
Social Circle Cotton Mills, Social Circle.....	1,344
Thomaston Cotton Mills, Thomaston.....	29,400
Total	120,172

Kentucky.

Puritan Cordage Mills, Louisville.....	204
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Louisiana.

Kohlmann Cotton Mill & Mfg. Co., New Orleans.....	1,080
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Mississippi.

None.

Missouri.

None.

North Carolina.

Elfrd Mfg. Co., Albemarle.....	10,000
Wiscassett Mills, Albemarle.....	20,000
French Broad Mfg. Co., Asheville.....	5,000
Hopedale Mills, Burlington.....	864
Chadwick-Hoskins Co., Charlotte.....	424
Robinson Mfg. Co., Charlotte.....	2,942
Roberta Mfg. Co., Concord.....	2,000
German-American Mill, Draper.....	11,500
Durham Hosiery Mills, Durham.....	13,006
Cape Fear Cotton Mills, Fayetteville.....	760
Tolar, Hart & Holt Mills, Fayetteville.....	242
Gray Mfg. Co., Gastonia.....	3,360
Borden Mfg. Co., Goldsboro.....	500
High Falls Mfg. Co., High Falls.....	400
Oakdale Mills, Jamestown.....	1,006
Klotho Mills, Kings Mountain.....	204

*New mill.

Pauline Mills, Kings Mountain.....	2,000
Phenix Mfg. Co., Kings Mountain.....	408
Erlanger Mills, Lexington.....	15,400
Wampum Cotton Mills, Lincolnton.....	1,600
Long Island Mills, Long Island.....	684
Dixie Cotton Mills, Mooresville.....	798
Catawba Cotton Mills, Newton.....	700
Rex Spinning Co., Ranlo.....	12,288
Robberdel Mills, Rockingham.....	800
Roxboro Cotton Mills, Roxboro.....	200
Shelby Cotton Mills, Shelby.....	400
Lily Mills, Spray.....	11,000
Nantucket Mills, Spray.....	3,000
Bloomfield Mfg. Co., Statesville.....	208
Taylorsville Cotton Mills, Taylorsville.....	480
Amazon Cotton Mills, Thomasville.....	500
Valdese Mfg. Co., Valdese.....	2,500
Bellwill Mills, Wilmington.....	924
Harden Mfg. Co., Worth.....	9,000
Total	135,098

Oklahoma.

None.

South Carolina.

Arcadia Mills, Arcadia.....	4,352
Aiken Mills, Bath.....	6,504
Seminole Mills, Clearwater.....	3,136
Conestee Mills, Greenville.....	4,612
Langley Mills, Langley.....	2,306
Hamilton Carhartt Mills, Rock Hill.....	1,728
Beaumont Mfg. Co., Spartanburg.....	684
Monarch Cotton Mills, Union.....	6,144
Union Buffalo Mills, Union.....	1,280
Total	30,746

Tennessee.

Elk Cotton Mills, Fayetteville.....	520
Jonesboro Yarn Mills, Jonesboro.....	400
Appalachian Mills, Knoxville.....	500
Brookside Mills, Knoxville.....	3,800
Knoxville Spinning Co., Knoxville.....	2,700
Hamilton Morgan Co., Nashville.....	448
Total	8,368

Texas.

South Texas Cotton Mills, Brenham.....	400
Gaudalaupé Valley Cotton Mills, Cuero.....	2,000
Texas Cotton Mill Co., McKinney.....	1,000
Total	3,400

Virginia.

None.

Total Installed.

Alabama	41,798
Georgia	120,172
Kentucky	204
Louisiana	1,080
North Carolina	135,098
South Carolina	30,746
Tennessee	8,368
Texas	3,400
Total	340,886

(Continued on Page 9).

Jacquard Mechanism for Looms

Lewis W. Brander and Charles U. Sumner, of Concord, N. C., have invented an improvement in Jacquard mechanism for looms, of which the following is a specification.

This invention relates to jacquard mechanism for looms, and consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings which form a part thereof.

The invention has as one object of to provide a jacquard head wherein

materially lessened whereby in the operation of the head the number of broken warp ends is greatly reduced in the cycle of operations.

It has a further object to provide a construction wherein an increased number of hooks may be employed as compared to prior jacquard heads of substantially the same size, thereby reducing the number of cards while correspondingly increasing the field and scope of design.

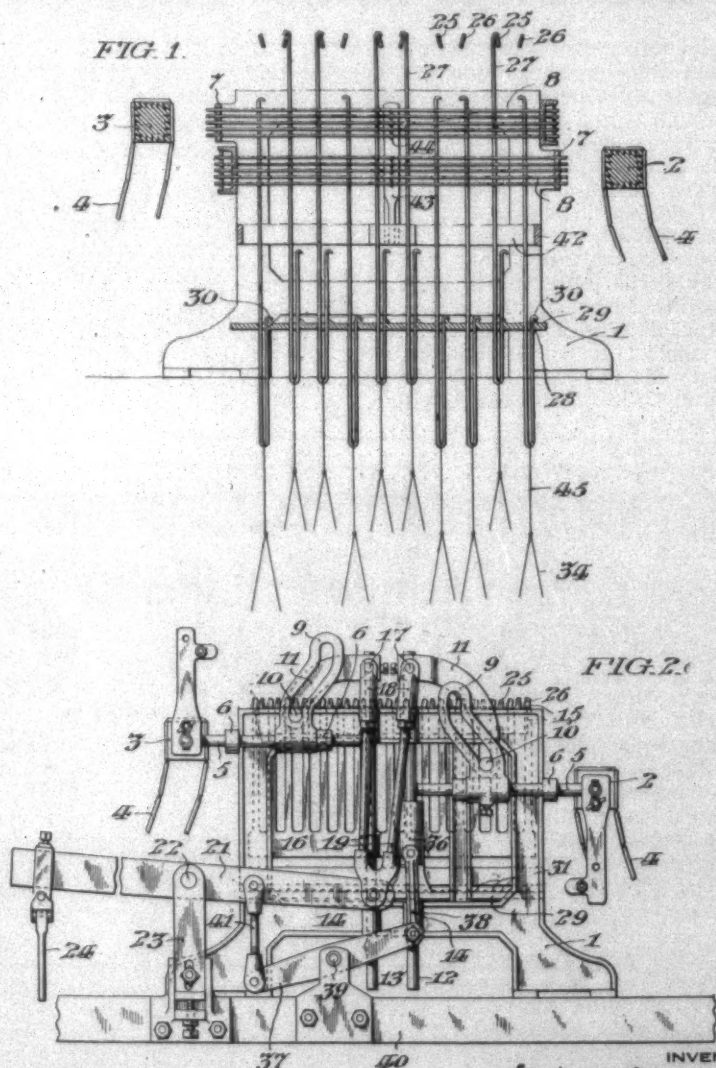
It has for a further object to pro-

vide a perspective of a portion of the movable grate which forms a support for the hooks; Fig. 6 represents a perspective of a modified form of griff frame; and Fig. 7 represents a detail of one of the supports for the brace rack for the needles.

Similar numerals of reference indicate corresponding parts.

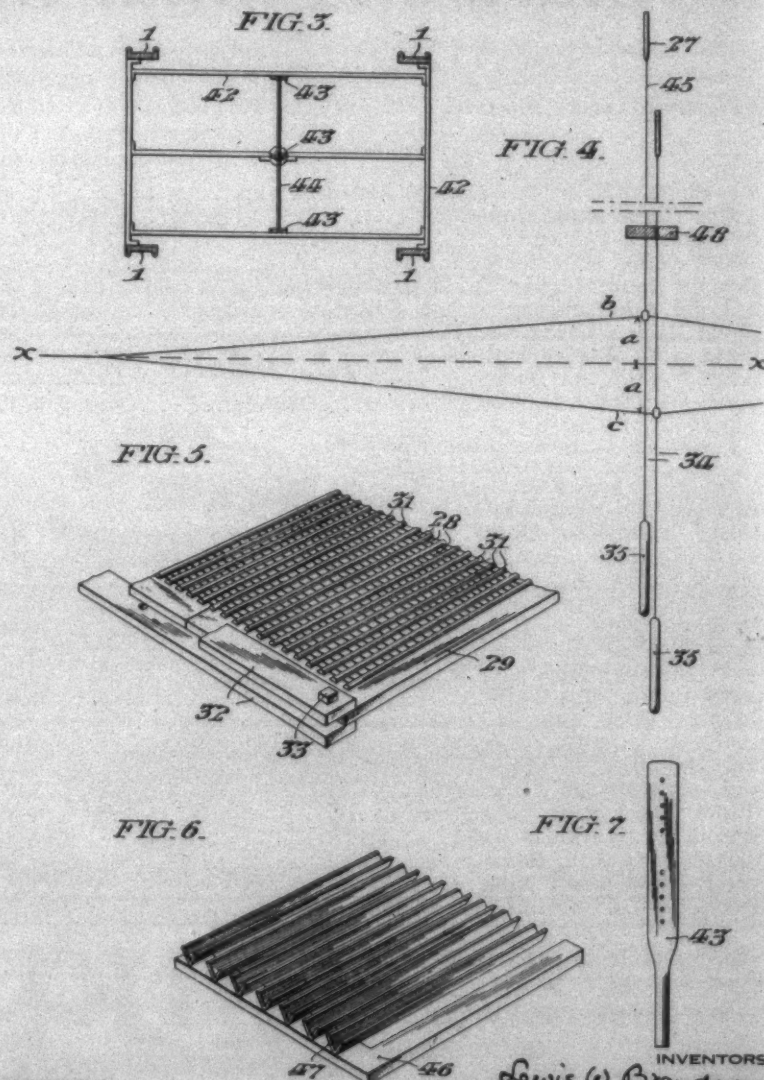
1 designates the head frame of a jacquard mechanism embodying our invention and in the present instance is the usual type of head

plates simultaneously instead of alternately as is the ordinary practice in a double lift machine, and the mechanism for actuating the cylinders consists of a pair of arms 9 for each cylinder and which are so shaped as to form a cam guideway for the respective cam rollers 10. The cam rollers 10 are carried respectively by the arms 11, which in turn are fixed in any suitable manner to the reciprocable plunger rods 12 and 13. These rods are mounted in pairs for sliding move-



WITNESSES
E. W. Smith
L. H. Wisemann

INVENTORS
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Charles U. Sumner
BY *Thos. H. Smith*
ATTORNEY



WITNESSES
E. W. Smith
L. H. Wisemann

INVENTORS
Lewis W. Brander &
Charles U. Sumner
BY *Thos. H. Smith*
ATTORNEY

each hook is separately connected to certain threads of the harness for governing certain warp ends whereby the neck cord, or connection between each hook and its harness, is maintained under tension for the purpose of minimizing the wear and obviating constant replacement of neck cords.

It has a further object to provide a construction wherein the level of the warp is maintained substantially uniform and the tension upon the warp equalized.

It has as a further object to provide a harness movement which affords a full open shed at predetermined times and by means of which the tension upon the warp is

vide a jacquard mechanism, the cards of which operate substantially simultaneously in pairs, each pair representing together one pick of the weft, so that in punching the cards one card is punched to form one portion of the pick and another card the remaining portion of the same pick.

Referring to the drawings:—Figure 1 represents a diagrammatic sectional elevation of a jacquard head embodying our invention; Fig. 2 represents a side elevation of the head and certain of its operating adjuncts; Fig. 3 represents a plan of the stationary frame for supporting the needle rack; Fig. 4 represents diagrammatically the warp slid in

for a double cylinder, double lift machine which we have preferred to employ as the foundation about which the construction of our invention is formed.

2 and 3 designate respectively the cylinders about which the cards 4 pass in the usual manner, and each cylinder is connected at its ends to the movable rods 5 which are guided in suitable lugs 6 of the frame and serve to move the cylinders toward and away from the cylinder plates 7, these latter supporting the outer ends of the sets of needles 8. In the present construction the two cylinders are brought into operative relation in close proximity to the cylinder

ment in apertured brackets or bearing lugs 14 of the frame 1 and receive their movement through mechanism which will be later described. It will be understood that there is a plunger rod 12 at each side of the machine which is not only connected to the adjacent arm 11 but is also fixed to a sleeve or lug of the part 15 of the upper griff frame. In a similar manner there is a plunger rod 12 at each side of the machine, said rods being fixed respectively to the lower movable part of 16 of the upper griff frame.

17 designates pins corresponding in number to the arms 11, one being secured to each arm and extend-

ing laterally to receive and form a pivot for a socket member 18, each of which has threaded connection with a rod 19, the outer ends of which are threaded into a head 20. Thus at each side of the machine there is one head connected to two of the rods 19, while the heads in turn are pivoted respectively to the ends of the bifurcated beam lever 21. This lever 21 is fulcrumed at 22 upon a suitable support 23 and receives its motion through the long arm 24 driven by a crank or like motion from a suitable part of the loom mechanism.

From the foregoing it will be apparent that a rocking movement of the beam 21 causes both parts 15 and 16 of the upper griff frame to be simultaneously raised or simultaneously lowered according to the direction of movement of the beam and thereby moves all of the knives 25 and 26 of the upper griff frame simultaneously and in the same direction. These knives or griffs serve as supports and carriers for the hooks 27, and each hook is controlled by a needle 8 in the well known manner. The lower ends of the hooks pass respectively through slots or apertures 28 of the grate or auxiliary griff frame 29, and are reversely turned to form a hook 30 at the lower end which is adapted to seat upon the transverse supports 31 of the grate, this construction being well understood to those skilled in the art. The grate or auxiliary griff frame 29 in the present instance is formed in sections, all of which are held by the end plates 32, which are clamped together by the bolts 33 or like securing means. By forming the grate in sections it is a comparatively easy matter to replace a broken section as it is unnecessary in this construction to disturb the entire tie-up as is required where an entire grate must be replaced.

As here shown, the grate or auxiliary griff frame 29 is movably mounted within the frame 1 in such a manner that it is free to reciprocate and therefore forms a movable support for the lower extremities of the hooks 27, the arrangement being such that the grate moves down while the griff frames are moving up and vice versa. Consequently those hooks which are not called up by the cards for a pick are lowered with the grate. In this connection it will be noted that the weight of the harness 34 and the lingoes 35 is sufficient to drop the hooks by gravity as the grate moves downwardly. In order to cause the proper movement of the grate or auxiliary griff frame 29 in timed relation with the movable griff frames, we have provided at each side of the grate a sleeve 36 fixed thereto in any suitable manner and mounted for sliding movement upon the rods 12. The sleeves 36 in turn are connected respectively to rock levers 37 through the medium of links 38, said levers each being pivoted at 39 to a fixed support 40 and connected at one end by a turn-buckle 41 to the beam 21. It will therefore be apparent that rocking movement of the beam 21 will cause the upper and lower griff frames to be simultaneously reciprocated in

unison while the grate 29 will be reciprocated oppositely, thus causing certain of the hooks to be raised while the remaining hooks are lowered so that the opening of the shed is formed by certain of the warp ends being raised while the remaining warp ends are lowered. For example, in the ordinary jacquard mechanism the open shed is formed by raising certain of the warp ends, while the others remain fixed, thus necessitating the warp being raised, say four inches for a four inch opening, while in our invention for such an opening the warp is raised only two inches at one side of the level and lowered two inches at the opposite side, thereby giving the full four inch opening with a material reduction in the tension upon the warp ends. In other words, the strain upon the warp ends is equalized by lowering a portion of the warp ends, while the other part is raised, and as a result the breakage

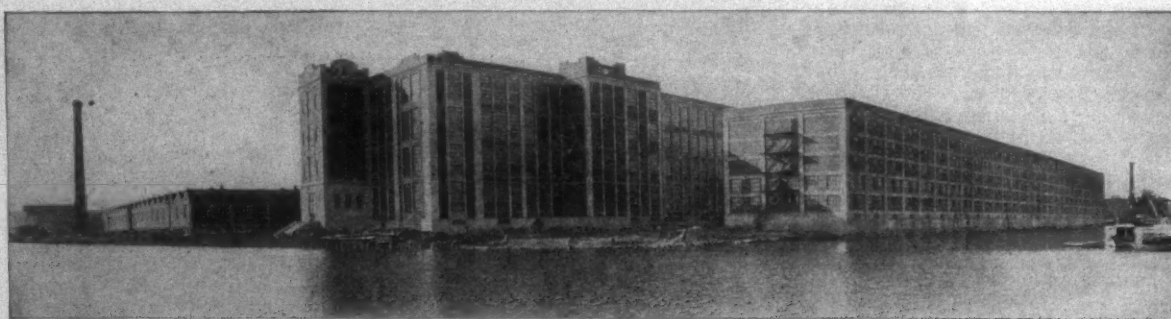
of the ends is reduced to a minimum.

In view of the fact that the grate or auxiliary griff frame 29 is a movable structure instead of a fixed one as in the ordinary jacquard head, it will be obvious that some means of supporting the needles are necessary since the ordinary support is mounted upon the usual fixed grate. In the present instance, therefore, we have provided a frame 42 which is fixed to the head 1 in a plane removed from the path of movement of the grate or auxiliary griff frame 29, and to this frame there is secured the apertured uprights 43 which serve to support the transverse wires 44 forming braces for the intermediate portion of the needles.

By reference to Fig. 1 it will be seen that each of the needles controls a single hook, and in consequence of the fact that both cylinders are in operative position simul-

taneously it follows that the two cards controlled by the cylinders are punched so that they act together to form the shed for one pick. In other words, a portion of the pick is punched on one card, and the remaining portion upon the other card, with the result that a simultaneous positioning of the two cards determines the hooks which are to be called up for one pick of the weft. Another result of controlling each hook by a separate needle is that substantially twice the number of needles may be used in the weaving operation, thereby giving a wide latitude of design and further permitting each hook to control but two threads of the harness. This latter tieup gives the widest possible range in the design of the cloth and the arrangement and variation of the design is only limited by the width of the goods.

By reference to Fig. 1 of the (Continued on Page 15)



NEW MILLS OF THE NAUMKEAG STEAM COTTON CO., SALEM, MASS.

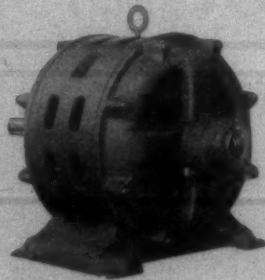
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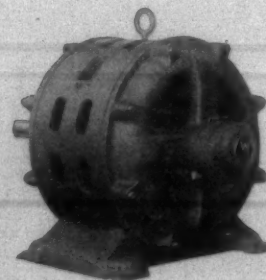
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Cause and Prevention of Uneven Yarn

Number Twenty-Four.

The contest on "Cause and Prevention of Uneven Yarn" should be a very interesting subject to the overseers and superintendents of the Southern cotton mills, for at the best we can do our yarn is very often uneven. At the end of this contest, however, I hope to be, and hope others will be, benefitted upon this subject.

Great care should be taken in selecting the stock to be opened; the staple should be as approximately uniform in length and strength as possible. It is absolutely necessary that the cotton should be well mixed, mixing as many bales as there is room to be opened, taking equal portions of the cotton from each bale and throwing it upon the pile. This cotton when being used, should be taken from the pile, perpendicular, as by this means a proportion of each layer will be removed together. Where the cotton is fed to the automatic breakers, the hopper should be kept about two-thirds full, for if it is run over to start with and then let run down real low before any more is put in there will be an uneven lap to start with.

The intermediate and finisher lappers have eveners and by keeping the eveners clean and active, we should get a good even lap. Have each finisher lap weighed as they are taken off the machine and do not allow these laps to vary over one-quarter of a pound either way, for laps must be made even, if even work in the following processes is expected.

With good, even laps upon the cards, then the quality of the work depends to a great extent upon good grinding and accurate setting as poor carding means poor spinning and poor weaving. The card hand, in putting on new laps, should not be allowed to lap the ends, but place them in just behind the end that is running out. If the ends are lapped this will cause a thick place in the sliver. Do not allow the cans to be run too full and tight, as this tends to stretch and weaken the sliver.

The drawing frames are perhaps the simplest machines used in the carding department and are among the most important. The drawing frame is for the purpose of drawing out and laying in parallel order, the fibers. The drawing and doubling also greatly reduces the unevenness of the sliver. Very often when the carder has new help to work and they are not skilled

enough to put on other machines he puts them on drawings. This is a great mistake. There should be a competent and painstaking person in charge. An improper working stop-motion will let an end run through, then if you haven't got a good man on the job he puts up the end, but fails to pull out the single drawing that has passed. It may not be many yards, but by the time it has reached the spinning room it has increased many times its length and results is weak and uneven yarn. A very important part of the drawing frame is the top rollers, whether metallic or leather covered rollers. Also the hooks and weights are very important parts. If metallic rollers are used they should be cleaned once per week, and all dirt and foreign substance removed from the flutes. If this is not done the flutes become full of dirt and the rollers will be slightly raised thereby causing cut sliver. When leather covered rollers are used they should be varnished regularly and often enough to keep them in good condition and with varnish that will not crack and peel off. When they are taken out to be varnished the section hand or the one in charge should examine each one to see if there are any with loose covering. If so they should be replaced with new ones, as they will damage the sliver. The rollers should be spaced to suit the stock, that is being used. This applies to the length of the staple.

Wornout trumpets are a defect on drawing frames and by all means keep the stop motion in the best of order, whether electric or mechanical. The sliver on the finisher drawing should not exceed sixty-two grains to the yard. In the slubbing process there is no doubling and is the first machine to put twist into the stock and wind it upon a bobbin.

Intermediates, Fine and Jack Frames.

In each machine there is a process of doubling. This adds to the evenness of the roving, if the frame is in good condition. Roving frame tenders should not be allowed to take up or let off the tension, for great care must be taken in regulating the tension upon the roving. If too great the roving will be stretched and thin and weak places will be the result. Top rollers on roving frames should always be kept clean and well oiled, if not they will run dry, thus causing cut and uneven work. All rollers should be examined once per month and all

bad ones replaced with new ones. Steel rollers should be properly set to the length of staple being used. Roving frame tenders in creeling should not be allowed to lap their ends, but join the ends together, thus saving a thick place in the roving.

Frames should be properly geared up, loose, worn, broken tooth gears and loose steel roller joints will cause cut and uneven roving. Keep the steel rollers clean. Do not allow laps to accumulate on them, thus increasing the size and causing uneven work. The creels and roller beams should be wiped off and not fanned off, as the latter causes bunches to catch in with the work. Roving must not be laid too close on the bobbins as the layers will ride each other, stretching the roving, nor too far apart, but should be laid so as to give a smooth appearance.

Another defect on frames is the bobbin gears jumping here and there, which is caused by the gears being very dirty or not properly set. When bobbin gears are allowed to jump it causes the coils to over-ride each other as they are wound on the bobbins and when the bobbin is unwound at the next process the part of the coil that is receiving the pull may be under another coil, which in most cases causes the roving to be broken back. If not broken back it will be stretched, uneven work. The end being wound around the presser a different number of times, or allowing the eve and nallow leg of the sliver to become clogged with dirt, which will cause hard and soft bobbins. Frame tenders should not be allowed to make singling and doubling. Singling is caused when one end running two into one is broken and the single end is allowed to run for a few layers. When the end is pieced up the defective roving should be pulled off. Doubling is caused by the broken end in the above case joining with the two other ends running along side, making three ends running into one. Doubling is also caused by the broken ends in the front running in with other ends. There should be no excuse for making singling and doubling. If the speeder tender is making singling and doubling it is the overseers fault. When speeder tenders make bad roving they know it and they should stop the frame and pull the defective roving from the bobbin, otherwise it will go to the next process making thick and thin places.

With the best of roving delivered to the spinning room if not under good, watchful management uneven yarn will be made. Draft is a very important item. I do not think the draft should exceed (12) twelve on double roving and nine on single roving, 10.50 or 11 on double roving would be much better as long drafts make uneven yarn.

As I have said elsewhere the rollers must be properly set to the length of the staple, which is from 1-16 to 1-8 of an inch greater from center to center of the rollers than the length of staple. If the rollers are too close together, the front roller will be biting the end of the staple before the middle roller turns it loose, thus causing cockley and uneven yarn.

Avoid changing draft gears on spinning as much as possible, because nine times out of ten you will make a thin place in each end. On the entire frame I find standard twist to be about the best, as too much tends to weaken the yarn and destroy the elasticity. On coarse yarns the travelers should be changed before they become worn enough to chafe and cut the yarn. On fine yarn they need not be changed as they will fly off when they become worn.

Use good top rollers and keep them clean and well oiled. Do not sacrifice the quality of your yarn by trying to save a few cents in the roller bill. Keep the weight levers in line. Do not have some of them resting on the creel board, this will not give a uniform weight on the top rollers, which will cause bad work. See that the roving traverse has a good stroke. Let it run as near the end as possible, without running out at the sides. It should not dwell upon the change. If the roving remains too long upon one spot it will wear a groove in the cot on the top roller and when the roving gets in the groove, the roller will not draw it as they should, thus causing lumps and bad places in the yarn. Have the roving wiped often enough to keep the creels clean and keep good skewers in the creels and do not allow them to be sharpened at the end with a knife, for this will soon cause trouble. The ends of the skewers will get brushlike, thus causing extra strain on the roving, making it break back and become stretched, thus making uneven yarn. Keep the scavenger rollers in good order and turning all the time, so as to catch the sliver as soon as the thread breaks. If the sliver is allowed to collect on the thread boards it will fall off and catch into

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the other ends, breaking more down, or cause lumps and gouts on the one next to it. Do not allow spinners to fan off or blow out their thread boards and back guides, as the lint will fly into the ends, causing lumps and gouts in the yarn.

Blue Jay.

Number Twenty-Five.

Openers and Pickers.

The picking department should have more intelligent care than it usually gets. Overseers should manage speed and feed to give plenty of time for cleaning both inside and out. Dirty and gummy conditions inside of pickers make very uneven laps. Beaters should be oiled light and often. All parts should be carefully adjusted and repairs looked after. Uneven and choked drafts cause much bad work. Eveners motions should be closely looked after, cone belts should be kept clean and not too tight, use no grease on them. All calender rollers and piano motions should be taken apart and thoroughly cleaned at least every two months.

You should have a good sensitive scale, and every lap should be weighed and kept as uniform as possible. Beater blades should be kept properly sharp, and carefully adjusted to accepted gauges. If pickers throw out too much clean cotton into the motes and fly, the grid bars should be set closer. When doing this fill the place under the beater with a narrow board covered with tin. Close all draft leaks and you will save much good lint cotton without injury to the yarn. These are good split lap preventers on the market and should be used as split laps are a great evil.

Cards.

Cards should have very careful attention. All parts should be very carefully set to accepted gauges. Great care and skill is necessary for good results. Grind light and often. See that you have no slack fillets. Look closely after licker-in teeth. When the teeth are uneven and broken, have new clothing put on, although they do no carding, they should be kept sharp, smooth, and even, or they will not give good results.

Cards should be leveled and thoroughly gone over at least once a year, as a card out of level cannot be closely and properly set. I will not give any rules for setting as every skilled grinder has his own rules, which in the main should be right. I have found this the best way. If grinder doesn't give good

results, make him change his system or you change your grinders. Grinding emery should be kept free next two processes. I advise using the same system that I use on slubbers in drafting intermediates and speeders. I am using it now with good results. Don't use bobbin that are larger or smaller than the accepted sizes. Larger bobbins will stretch the roving, smaller ones will cause slack tension and soft roving. I can not emphasize too much the necessity of slack, uniform, tensions on all three fly frame processes.

Spinning Frames.

Spinning frames should be carefully leveled and lined about once a year, and all parts properly adjusted. Spindles should be plumb-ed top and bottom and thread guides set to spindles. Travelers should be carefully filled to ring flanges and changed fairly often. Rollers should not be set too close or cockled yarn may result. All bands should be of uniform sizes or uneven twist will result. Bad top rollers make bad yarn, dry rollers injure the yarn. Dirty rollers make much waste and dirty yarn, rough rollers make waste. Laps on steel rollers make uneven yarn, fluted leather rollers make uneven yarn. If used in front they make a finer thread than a good smooth roller. If used in the back they make a coarser thread. Top rollers should be carefully lined to steel rollers, or cut yarn many result. Roving guides should be carefully adjusted for the roving will run out at the ends and break or cut the yarn. Lost motion in guides ruin the rollers and badly cut yarn many result. Good, clean top roller cloths are a necessity. Cot wires should not bear on rollers. It cuts the cloth. In all mills where different sized whorls are used the spindles are liable to get mixed, causing uneven twist and kinky filling. Careful doffing prevents much bad work, every broken end causes waste and lumpy yarn. Frames should be very systematically cleaned and oiled. Eternal vigilance is the price of good quality and quantity. (All overseers and second hands please take notice).

Keeping Numbers in the Carding Department.

As my strong hold in the carding department has been keeping close numbers which is vitally important to even yarn, I will give my views on it. When my advice is asked about it I tell them that I keep them in the three processes of the picking department and this is true, as uneven laps are hard to

overcome. Although I size my drawing twice each day, in doing this I measure one yard from every from oil, or dirt, for best results. Above all keep cards clean and free from all gumming substances, especially about fronts, as gum and dirt break many ends and cause uneven sliver. Don't fill cans too full. With light careful grinding cards need not be stripped more than twice a day as they will not change as much as heavier ground cards.

Drawing Frames.

A great deal of bad and uneven yarn is made on the drawing frames from lack of proper adjustments and close attention. The rollers should be set at proper distance apart for the length of staple used. The distances apart should be graduated in proportion to the bulk of sliver and the amount of draft between each roller, on medium counts and middling cotton I set my rollers as follows: 1 3-8 inch, 1 7-16 inch, and 1 1-2 inch with good results. The tension between front roller and calendars should be give and take as near as practical. Metallic rollers will allow for more storm than leather, as they leave a crimp that is somewhat more elastic. A great deal of bad uneven sliver is caused by badly adjusted stop motions and waste clogged spoons. When an end runs through back roller without stopping the attendant should remove the spoon, place it in sight on the top roller cover and notify the fixer. (And leave the spoon out until it is fixed).

When electric stop motions don't stop promptly the first aid should be to clean all electric parts, if that don't remedy it notify the fixer. Scour all metallic rollers every two weeks, as dirty flutes make bad sliver. When cleaning don't mix rollers, or change ends, or uneven tension and bad sliver will result. Don't allow hands to use brushes on rollers as it makes dirty work. Here as elsewhere, keep things clean.

Slubbers.

Slubbers should be leveled and lined at least once a year and all parts carefully adjusted. All horse-head trains should have patent washers and good jamb nuts. This also refers to all parts that are liable to jar loose. Much chopped sliver is made on slubbers, as a large bulk is drawn by comparatively small rollers. The strain of the drafts cause a vibration in the rollers which does a great deal of damage to the yarn. This doesn't show in the roving, yet it makes a choppy yarn; the longer the slub-

ber the greater the damage. As to drafts. I draw about one-third between middle and back rollers and about two-thirds between front and middle rollers, thus my draft is 4 to 1. I do away with the intermediate gear between middle and back rollers. In its stead I use two gears fastened together. My back roller gear has 30 teeth, middle roller gear has 19 teeth, my double gear that enters into back roller gear has 64 teeth, my driver that enters into middle roller gear has 72 teeth. This gives a draft between middle and back rollers of 1.42, and between front and middle 2.81. I set my rollers apart as follows from front to middle; 1 5-16 inch, and from middle to back 1 7-16 inch from center to center. I have gone into this in detail as it is a new departure (as far as I know). The results are so good I wish others to try it. As I use the same stand and stud, the two gears are the only extra expense.

The tensions between front rollers and flyers should be fairly slack and uniform from the empty to full bobbin. Slubber roving should be twisted just enough to carry it without break or strain through the next process. Roving guides should be carefully set to traverse a safe distance without any lost motion. This is also true with carriage motions. Do not allow hands to take up or let out tensions, or uneven roving will result. Presser fingers should be carefully adjusted to bobbins. Don't allow help to wrap the sliver more or less than the accepted turns. If an end runs slack, don't allow help to hold their thumbs on roller as it injures the sliver. Break back the end. Careful cleaning and oiling of all parts should be enforced. A dry roller will make uneven work. Spindle and bobbin gears should be cleaned and oiled systematically. Hands should be taught to piece-up ends without leaving thin and hard places.

It is not necessary to treat intermediates and speeders, as my remarks about slubbers cover the finisher drawing. I add these together and strike an average, but as nearly all carders do this I am not enlightening the reader much. What I wish to emphasize is your judgment about changing when weights vary, which they often will. In heavy damp weather laps will absorb much moisture. This can be overcome by making your finisher laps from 1-4 to 1-2 pounds heavier according to the length; don't do this light weight drawing will result. Do not change for every little variation, but let your judge



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Feeds Uniform Cotton to Lappers
Makes Numbers Run Even
IMPROVES GRADE OF YARN

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ment have good play between the lines. Keep an accurate account of your weights and average them say once a month. This will be a guide to your judgment when your roving weights don't agree with the spinner weights, look for a reason in the spinning room, reel or on the frame. It will be a mutual help. A good spinner will help his own interest by cooperating with the carder. Consult together, give and take advice, and good will result.

Old Hundred

Number Twenty-Six.

I want to thank Mr. Clark for the opportunity of allowing me to publish in his paper the opinion I have formed concerning "Cause and Prevention of Uneven Yarn."

Keep your cotton as dry as possible, as you cannot keep your numbers even with running wet cotton one day and dry cotton the next. Different grades of cotton not mixed makes bad work on pickers and cards, in fact on all the machinery used throughout the mill, such as speeders, spinning frames, etc.

Suppose you have 2 or 3 different grades of cotton to run. Run one grade and see that all the waste is put in of that grade regularly each day as long as that certain grade lasts.

See that the drafts on your pickers are the same, so as to make the laps even. Do not let your laps vary more than one-quarter of a pound, if there is any variation at all.

In some mills the card hands resticks the laps. If this is true with your mill, do not let the hands pound the end out of these. Be sure that the cards take out about the same amount of flyings and strippings. Have the hands keep the cards clean so there will be no lint for the sliver to drag upon.

Put laps on even so as to prevent thick and thin places in feeding. Take out all thick places and singling that should pass through the doffer. Piece all ends.

See that your drawing is kept clean at all times. Be sure that your stop-off motions are in good shape, so no bad work will go through. Keep laps on steel rollers clean.

Slubbers should be kept clean and allow no hard ends to be made. Be sure you have the right draft on them. With this little trouble eliminated, you will have good work for the intermediates.

I am sure that if the intermediates are kept clean and properly drafted, and no hard ends, singlings and doublings allowed to be made, you will get good results.

This will put the work to the speeders in good shape. Also keep the speeder room clean, in fact all of the machinery should be kept so. Do not allow bad work to be made. Creel two rows of roving on each frame at intervals.

Have the leather rolls calipered and put them in all frames as near as possible the same size.

If the above rules are carried out, the spinner will have something with which to make even yarn.

Of course the spinner must do his part. He must not allow hands to become loose, and not allow fanning off. Do not give the spinners more sides than they can keep up.

Take out all leather covered rolls that have become loose and have them replaced with new ones. Use the right size travelers and have everybody stay on the job.

After these rules have been carried out, see if you do not have

better and more even yarn, and much better running work.

I do not claim to know it all, nor to have told all. But I have had some experience in this line of work.

Good Luck.

Number Twenty-Seven.

Cotton should all be graded. Get the average grade and mix to suit the grade. Set the machinery or rolls to suit the grade and mix as many as 10 bales for a mixing, using a little off of each bale at a time. If possible, mix today what you need to run tomorrow.

Keep the opener or breaker hoppers evenly fed, preferably about 3-4 full, as heavy feeding at different times will cause light and heavy laps. If you use the trunk system, see that your drafts in the fan flues are kept clean, and that it loses no draft, so that the cotton can be evenly spread on the condenser screen.

White drawing or roving as well as scavenger roll waste should be mixed in even during the day's run.

Have the fan speeds in excess of the beater drafts. Let the fan speeds or drafts just take care of the draft of the beaters at all places, so that the cotton will not float around over the screen, but be strong enough to catch the cotton as the beater knocks it over and sucks it to all little open places in the screen, as it revolves. This assures you of an even spread. See that the discharge pipes are kept clean, watch the blowouts on the sides of the draft flues, commonly called "back draft."

The lapping of the aprons should be done by having two about half full and two full, which gives you a uniform weight on your aprons, assuring you of good running of the aprons, and no slips by being overweighted at one time and overrunning at another.

In lapping up full laps, it should be done by letting the end just running out just come together, end for end, with the one you are putting on. Avoid broken gearing in the feed gear, slack eveners belts, bad oilings, or bearings running dry and sticking up, evener gearing not being kept in good shape.

The clothing on the cylinder should be good, tight, firm and elastic, as soft or weak fillet cannot stand up to it and card the stock out properly. The clothing on the cylinder doffer flats and the lick-in should be sharp and truly set to suit the amount of stock going through it. Uneven settings mean uneven yarn. If the lick-in has badly mashed places or parts of the strands of the teeth out, it will cause cloudy, unevenness.

Fanning or running up and down the card alleys will cause the sliver to break, and loose matter to float in. The sliver, once broken, drops down a trifle and is more than likely to catch on in a bit and double back in, causing thick and thin places. Cards not being stripped cleanly and regularly will cause them to fill up and not do their duty in properly carding the fibres out. Flats ground down too low before reclothing will loose their carding strength, and the same is true of weak cylinder fillet that has gotten soft and rotten.

The ends should be broken down at the coiler heads while stripping out the doffer. Then they should be carefully pieced together after it has run enough to come the usual size.

In setting the laps on the back

of cards, care should be taken not to let the old laps, or the last part of the one on the card, run entirely out, as it is thicker than the other portion of the lap. About 36 inches should be broken out and put in the white waste, then the new laps carefully pieced end for end. Worn out gearing on the feed roll shafting will cause irregular feeding of the laps, making uneven work.

Running the cans too full, makes friction against the coiler, straining the sliver, and making it uneven.

If split laps are allowed to run, then straighten out on the back of the card and the uneven sliver not taken out of the cans down to where the sliver was before it split, the sliver will be uneven all the way through. Doffer combs run too high will stretch the sliver. A little waste accumulating on the cylinder screen next to the doffer, as it usually does, will cause it to rub against the doffer as it revolves and cause bad selvages, or if in the center or anywhere, will cause little holes in the sliver and eventually pull off and go through. This means places with little holes in it, and others with lumpy places. When such places are found, the card should be stopped and the dirty and rough places wiped off.

First of all have the frame rolls and gearing wiped clean, good gears, and gears set properly. Dirty drawing frames mean cut or uneven sliver, which is also true of bad gearing or poor gear setting. Then if the frames are not kept oiled as they should be it means dry rolls and vibrating rolls from being dry, causing unevenness. Calender rolls drawing the sliver too tight will cause stretched places in the sliver. Some trumpets being bored too large while others on the same frame are smaller, will cause some ends to run too tight, drawing thin places, while others run too slack and sag, occasionally catching up by looping through the trumpet making a knot in the sliver.

Excessive speeds, creeling not properly done in the cans on the back of the drawing frame, making doubling or singling on creeling them, all means uneven work.

Drawing frames should be creel- ed in all at one time by carefully piecing the ends together. When calender roll necks get worn down it is hard to get even work. Keep the knock-off motions working properly. Cans which are rough at the top will cause the cotton to chop off and lumps form, and from time to time they will find their way into the sliver.

One thing, is to try to keep good and reliable hands on the job, just the same as you would pick out one for the roving frames, and try to educate them to the meaning of and the necessity for, good work, at this machine.

Slubbers, in some respects, will include the intermediates, speeders and jack frames. First of all, we must have all gearing in good condition, and then set well, so it will not slip or crawl and quiver. Do not draft too long, or have any more twist in the roving than is necessary to keep it from breaking back at the next machine, as hard twisted roving is hard to draft out. Then the proper tension is to be considered, as it is one of the most essential things on a roving frame of any kind. Start the frame off at doffing time with the ends just wavering a bit, then use the proper tension gears to carry the cone rack

out until the bobbins are full. That will give you the same soft tension without any stretching. Doff them just before they fill out to the nnger.

Caliper all bobbins and use none that will not caliper within one thirty-second of an inch of one another. Then you can set the tension very close and keep it. Allow no roving frame hand to put chokes up under the clearer boards to squeeze up on the shell rolls to make some end stay up that has been broken down for a change or two of the carriage. Clean and oil the arbors or mantles once a week, which also applies to the back and middle rolls. Keep the chokes out from the solid rolls and under the saddles and see that the latter have oil on them at all times. Also see that the stands on the steel rolls are kept oily and clear of chokes around the stands. The flutes should not be scarred up, the necks in steel rolls should be good, so as to allow no back lash, and the roving traverse in good working order.

See that the spindle and bobbin gears are oiled regularly, also the spindle steps. Never allow them to become dry, or any other running parts on the roving frame. In creeling the roving frame see that ends are pieced together and not stuck in, thereby making a three-ply creeling, instead of a two-ply. Have good skewers and good skewer steps, as inferior ones cause the bobbins to pull hard and stretch the roving. Use the same precautions as to oil, gears, tensions and other causes on roving frames, as mentioned above.

Try to prevent strong winds blowing through the windows into the room, as they cause flying lint and waving ends at different places. Some ends will be irregularly broken down part of the end will catch in and draw itself into the running stock, especially on cards and drawing frames, causing uneven work.

Try to keep the temperature of the room as near constant as possible as the conditions will allow. Once you get the average temperature, you have but little trouble with the drawing and roving frame tension, which is one of the most dangerous things to even yarn.

The leather top rolls should all be calipered, the shells matched, the flannel of a regular thickness and cots stuck so as to allow the laps just to cover and run them off of the laps instead of against the laps of the cots. They should be stamped by the roller shop man to show which way the cots are stuck.

Spinning frames are almost similar to the roving frames. First, we must have good gearing and good settings. Then good leather rolls and good oiling of top rolls and keep them clean, also good banding. Do not allow slack banding. Use the traveler that runs best, and 99 times out of a 100 it is the traveler that should be used, for good spinning depends a lot on a well suited traveler, the quality of roving being good. Fluted top rolls should not be used. The oiling should be kept up with on all parts. Spindles kept set right, plumb, and guides to suit the spindles or directly in terms with the spindles. Keep the roving traverse in good working order, the skewers and steps in good condition. Allow no fanning off and be very careful in wiping off guides. It is hard to make even yarn with loose bolsters and dry spindle steps. The setting on all rollers in either the carding

(Continued from Page 3).

MACHINERY UNDER CONTRACT FOR EARLY DELIVERY.**Alabama.**

Abingdon Mills, Huntsville.....	10,000
Munford Cotton Mills, Munford.....	432
Total	10,432

Louisiana.

Lane Cotton Mills, New Orleans.....	4,800
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North Carolina.

Wiscasset Mills, Albemarle.....	20,000
Climax Spinning Co., Belmont.....	21,760
Bladenboro Cotton Mills, Bladenboro.....	12,000
Hopedale Mills, Burlington.....	5,000
Norcott Mills, Concord.....	6,000
German-American Mill, Draper.....	11,400
Franklinville Mfg. Co., Franklinville.....	2,000
Falls Mfg. Co., Granite Falls.....	5,040
High Falls Mills, High Falls.....	403
Cannon Mill No. 4, Kannapolis.....	21,000
New mill at Mt. Holly.....	10,000
Edenton Cotton Mills, Edenton.....	9,000
Corriher Mills, Landis.....	1,200
Millneer Cotton Mills, Statesville.....	5,000
P. H. Hanes Knitting Mills, Winston Salem.....	10,000
Spray Cotton Mills, Spray.....	4,623
Mayes Mfg. Co., Mayworth.....	8,000
Arlington Cotton Mills, Gastonia.....	11,000
Salisbury Cotton Mills, Salisbury.....	2,080
Wadesboro Cotton Mills, Wadesboro.....	896
Total	151,412

South Carolina.

Verona Co., Clover.....	10,000
Monarch Cotton Mills, Union.....	12,800
Republic Cotton Mills, Great Falls.....	32,640
Whitney Mfg. Co., Whitney.....	13,000
W. S. Gray Mill, Woodruff.....	1,200
Woodruff Mfg. Co.....	5,000
Total	45,640

Tennessee.

Thatcher Spinning Mills, Chattanooga.....	10,000
Sylvan Cotton Mills, Shelbyville.....	7,000
Elk Cotton Mills, Fayetteville.....	5,016
Total	22,016

Total Under Contract.

Alabama	10,432
Louisiana	4,800
North Carolina	163,412
South Carolina	74,640
Tennessee	22,016
Total	275,300

or spinning should be just so wide as to escape the staple. Use no excessive drafts on any drawing process. The shorter the better, to a limited degree.

J. S.

Landrum, S. C.—The Blue Ridge Hosiery Mill at Landrum will pay 3 per cent.

It is understood that the Shamrock Damask Mill will pay a dividend.

33,000 Tests Made of Textile Fabrics.

Washington, Dec. 27.—During the fiscal year 1915 the testing of textiles by the Bureau of Standards included 33,000 separate routine tests and over 300 co-operative tests, according to a report covering the activities of that bureau, just issued. About one-tenth of the tests were made for the various government departments. Many special investigations have been undertaken; for example, on the effect of cotton compression in baling upon

tests up to a density of 50 pounds per cubic foot will be made.

The bureau has also investigated the subject of the cotton bunting which is now manufactured for making flags as a substitute for the more expensive wool bunting. Numerous laboratory tests were made, which included strength, weight, fastness of color to light, water and chemical reagents. This cotton bunting was also subjected to actual service, or practical weather tests on the seacoast. In every instance where the cotton was tested a wool sample was similarly treated, thus enabling a comparable examination of the two fabrics after treatment to be made. As a result of this investigation, large quantities of cotton bunting are now used in the navy and other departments. The textile work of the bureau includes the development of specifications for textiles, the testing of samples submitted by bidders on a basis for award of government contracts for supplies; the testing of

the spinning qualities of the fiber. delivery on contract to check the Bales now run about 25 pounds per cubic foot. If cotton can be further compressed without injury to the fiber, savings could be effected in bale covers, transportation, warehouse charges, etc. Compression testing.—Daily Trade Record.

LAHUE NEVER-SLIP STEEL LUG STRAPS

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**SACO-LOWELL SHOPS
TEXTILE SERVICE**

FOR the convenience of our customers, we maintain in connection with our Charlotte office, a completely equipped shop, for the proper reclothing of Card Flats and Card Lickersin. Skilled experts are in charge and we invite you to avail yourselves of this service. A stock of card clothing constantly on hand enables us to supply all requirements promptly.

We are especially anxious that all our cards either Newton or Lowell pattern give satisfactory service and upon request will send expert to inspect cards and make such recommendations as may be necessary to put them in the very best possible shape.

ROGERS W. DAVIS, SOUTHERN AGENT
CHARLOTTE, N. C.

SOUTHERN TEXTILE BULLETIN

Offices: Room 912 Realty Building, Charlotte, N. C.

Published Every Thursday By

Clark Publishing Company

DAVID CLARK, Managing Editor

D. H. HILL, Jr., Associate Editor

SUBSCRIPTION.

One year, payable in advance.....\$1.00
Other countries in Postal Union..... 2.00
Single copies10

Contributions on subjects pertaining to cotton, its manufacture and distribution are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

ADVERTISING.

Advertising rates furnished upon application.

Address all communications and make all drafts, checks and money orders payable to the Clark Publishing Company, Charlotte, N. C.

Entered as second class matter March 2nd, 1911, at the post office at Charlotte, N. C., under the Act of March 3d, 1879.

THURSDAY, JANUARY 6, 1916.

Clark's Directory.

Although slightly delayed we are this week printing the Jan. 1st, 1916 edition of Clark's Directory of Southern Cotton Mills and they will be ready for distribution in a very few days.

The call for Clark's Directory has this time exceeded all previous demands and we have booked a large number of advance orders.

Many firms have placed with us standing orders for one or more copies of the Directory, which are to be mailed promptly whenever a new edition is issued.

Clark's Directory of Southern Cotton Mills has not only established an enviable reputation for accuracy but is the most conveniently arranged textile directory that is published.

It requires less time to find the desired information in Clark's Directory because all unnecessary and useless data has been eliminated and the live data arranged in a simple, compact form.

There are very few men who now travel among the Southern cotton mills without Clark's Directory in their pocket.

Spindle Increase for 1915.

On page 3 we are publishing Clark's Annual Spindle Increase list, showing the mills that have made an increase in their spindles during 1915.

This information is very largely compiled from the Jan. 1st, 1916 edition of Clark's Directory as compared with the Jan. 1st, 1915 edition and effort has been made for accuracy but it is very hard to distinguish between machinery that has been bought and that which has actually been installed. Many mills include in their report of the number of spindles those that have been purchased and are to be installed and this frequently causes errors.

This year we have made out two separate lists, one being the machinery which we are informed has been installed and the other for machinery that has been purchased but not yet placed in operation.

Spindles Installed During 1915.

Alabama	41,798
Arkansas
Georgia	120,172
Kentucky	204
Louisiana	1,080

Mississippi
Missouri
North Carolina.....	135,098
Oklahoma
South Carolina.....	30,746
Tennessee	8,368
Texas	3,400
Virginia
Total.....	340,886

When it is taken into consideration that the later part of 1914 and the first half of 1915 were periods of dullness and uncertainty we regard this showing as indeed remarkable.

The installation 340,886 spindles represents an investment of more than \$7,000,000 and in most cases the enlargement has been made from earnings or financed locally. The spindle increase of recent years has been as follows:

1912.....	803,882 spindles
1913.....	435,300 spindles
1914.....	319,410 spindles
1915.....	340,886 spindles

We have no figures relative to the machinery or orders on Jan. 1st of other years and doubtless there are many contracts of which we have no knowledge, but we have information relative to the following number of spindles that have been purchased and are to be installed at an early date:

Alabama	10,432 spindles
Louisiana	4,800 spindles
North Carolina.....	163,412 spindles
South Carolina.....	74,640 spindles
Tennessee	22,016 spindles

Total.....275,300

With this number of spindles already purchased for installation during 1916 we can predict that this year will be the greatest in the history of cotton mill building in the South.

The builders of cotton mill machinery are known to have orders which will keep them busy throughout the year and prices have been advanced several times within the last few months.

Best Thing For the South.

It is high time those writers and magazines are called to account that continue to misrepresent conditions in the South. This applies particularly to the broadcast misrepresentations about labor conditions in our Southern cotton mills. Those conditions are not perfect here, any more than in Massachusetts, or New York, or the west. It is true also that some other things in the South need to be bettered, especially the matter of rural credits. Our own ideas on this subject have been beautifully and forcibly expressed in

his recent letter to the constitution by Richard H. Emonds, editor of the Manufacturers' Record.

If the newspapers and the people of the South would whole-heartedly and unitedly seek to banish from this section the curse of alcoholic drinks; if they would in the spirit of friendly co-operation, rather than of hostility and criticism, co-operate with manufacturers who are vigorously striving to better the condition of their employees; if they would unitedly seek to better the condition of the tenant farmers of the South and stimulate them to better farming and to the production at home of foodstuffs, they would accomplish infinitely more, not only for the material, but for the moral and spiritual advancement of the people of the South than has been done, and they would make attacks upon the South unpopular and unprofitable.—Southern Farming.

Keating Bill Referred to Labor Committee.

The Keating Child Labor Bill was on Tuesday referred to the Labor Committee by Speaker Champ Clark.

We had been hoping that it would be referred to the Committee on Interstate Commerce, where it belongs, but Speaker Clark sent it to the Labor Committee, because a similar bill went to that committee when introduced in the last Congress.

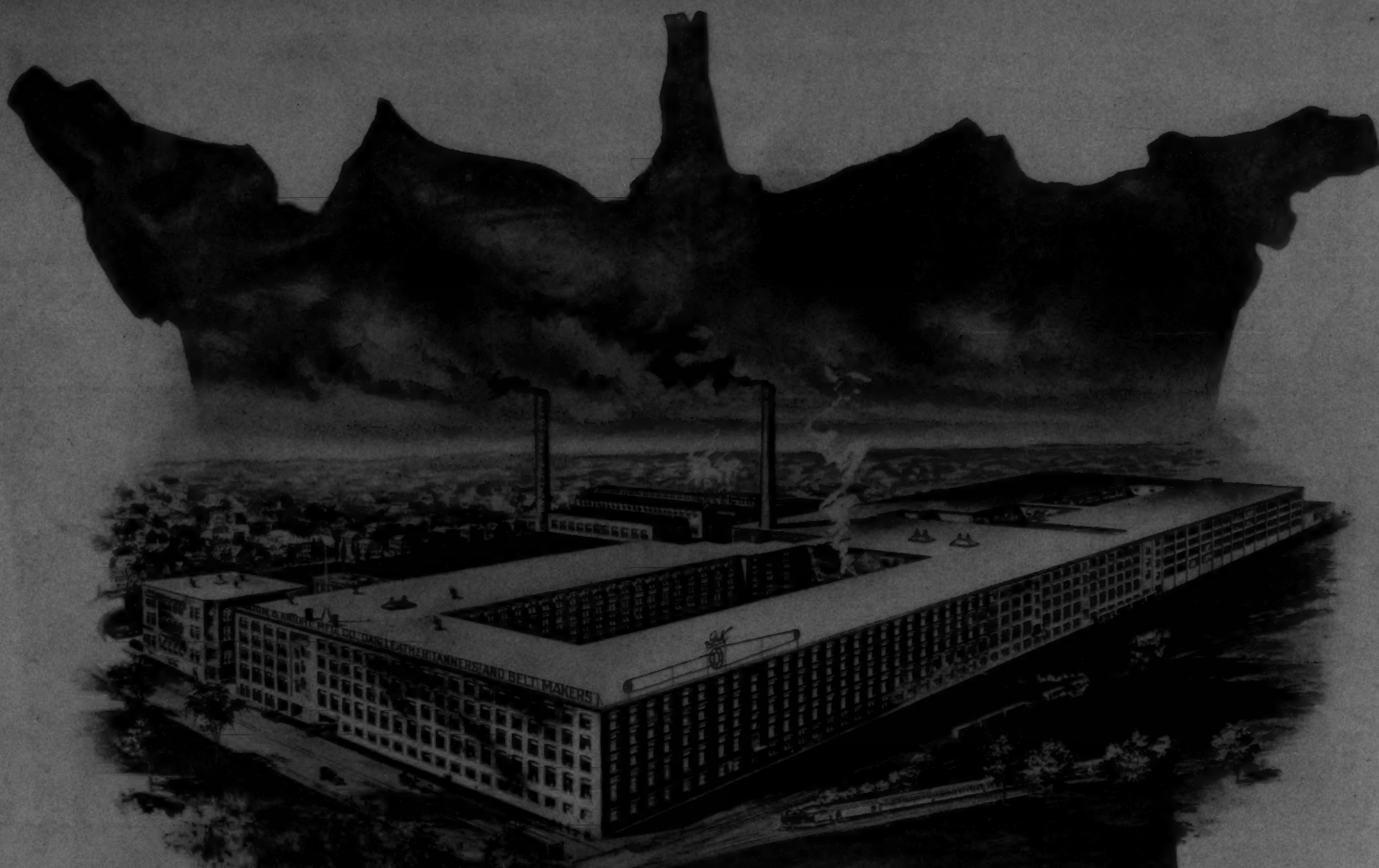
The Labor Committee has on it one Socialist and several officials of labor unions and will pay little attention to any claims of the cotton manufacturers.

While they will report the bill favorably we believe that there are several members of the committee who will, after considering the arguments, file a minority report.

Textile Institute to Raise \$50,000.

The Textile Industrial Institute, of Spartanburg, S. C., has launched a campaign to raise \$50,000. They want this amount from the people of Spartanburg and vicinity to pay off the present indebtedness on the lands and buildings of the original plant.

It is planned to raise this amount by means of a whirlwind campaign beginning January 10th, and lasting one week. Subscriptions will be received in cash or in building and loan stock. Leading business men of Spartanburg will conduct the campaign.



The Graton & Knight Mfg. Co.

LEATHER BELTING
 Solid Round
 Twist Round
 Motorcycle
 Auto Fan
 "V" Shaped, etc.

SPECIAL BELTING
 Solid Round
 Twist Round
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LEATHER
 LACE LEATHER
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 T... etc., etc.
 SHOES & SUPPLIES
 Insoles, Outsoles, Counters
 Box Toes, Welting

The Graton & Knight Mfg. Co.

OAK LEATHER TANNERS AND BELT MAKERS
 Worcester, Massachusetts, U. S. A.

BRANCHES

Atlanta	Cleveland	Detroit	Kansas City	New Orleans	Philadelphia	Portland, Ore.	San Francisco
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Selling Agents { The Graton & Knight Mfg. Co. of Texas, Dallas, Texas
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WORCESTER, MASSACHUSETTS

MANUFACTURERS OF

MILL and MACHINE BRUSHES

OF EVERY DESCRIPTION

FOR COTTON, WOOLEN and SILK MILLS

BRUSHES REPAIRED

Confidence

We are mighty proud that cotton manufacturers have confidence in our products. And we jealously guard against anything and everything that would tend to weaken that confidence.

The Fales & Jenks Ring Spinning Frame

is one of our representative machines, and on its merits alone has stood the test all these years. On it the Tape Drive and other justified improvements first made their appearances.

Thus today we can show you a frame that is simple, convenient, easily adjusted, rigid and substantial. Our catalogue No. 36 will be sure to interest you.



Fales & Jenks Machine Company
Pawtucket, Rhode Island

Specialists in Cotton Mill Machinery

PICKERS AND REVOLVING FLAT CARDS

POTTER & JOHNSTON MACHINE COMPANY, Pawtucket, R.I.

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Northern Representative, L. W. CAMPBELL
100 Summer Street, Boston

SPOOLERS, REELS AND SPINDLES

EASTON & BURNHAM MACHINE COMPANY, Pawtucket, R. I.

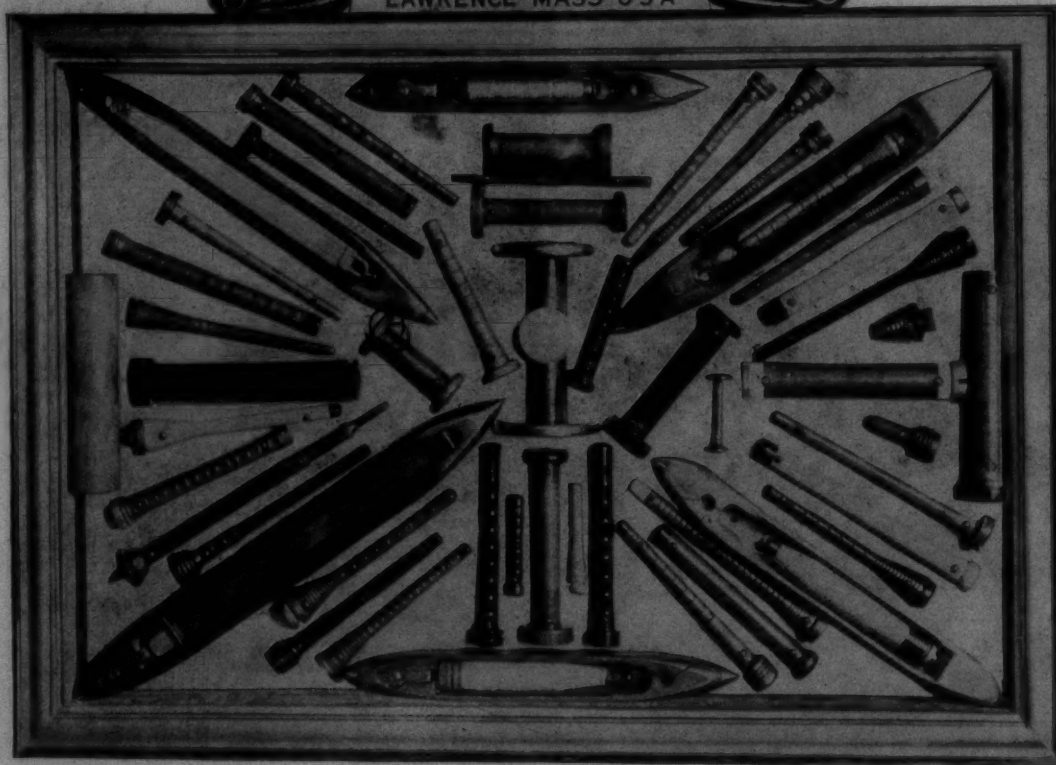
RING SPINNING AND TWISTING FRAMES

FALES & JENKS MACHINE COMPANY, Pawtucket, R. I.

Southern Representative, J. H. MAYES
Independence Bldg, Charlotte, N. C.



OUR MOTTO: "HIGH GRADE"



About "BROWN" Bobbins

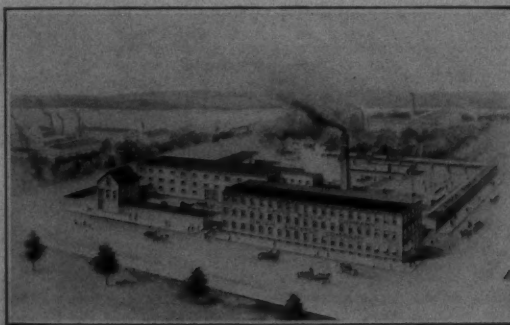
The David Brown Co. are successors to the Weld Bobbin & Spool Co., manufacturers of a complete line of bobbins, spools, skewers, etc., for all kinds of textile mills. Warp and filling bobbins with metal bases a specialty. Also metal base speeders, Boynton shield spools, Draper bobbins, etc., a specialty. Our prices are right, our deliveries prompt and our quality unsurpassed.

Write us when next in the market. We will be pleased to submit samples with quotations showing our goods.

Cotton, woolen and worsted mills equipped complete with our line all over the United States.

About "UNION" Shuttles

Pioneer manufacturers of Hand or Self-Threading Shuttles in 1883. Since that time have maintained the lead over all other following hand threaders. We have another new type coming out in January, 1916, which embraces all the good points of preceding types and something entirely new in addition. It will be particularly adapted for use in Stafford looms. Write us for samples and particulars. Also the leading manufacturers of woolen and worsted shut-



MILL: SOUTH LAWRENCE, MASS.

tles. If you have never used "Union" shuttles better get in line with our long list of satisfied customers. No order too small, none too big for our careful attention.

STARCH

SPECIAL STARCHES

We have made a study of the requirements of the industry and now manufacture special starches adapted to every requirement of cotton manufacture. Our brands of Textile Starches are the results of years of scientific investigation coupled with practical experience. We are prepared to study the requirements of mill and supply starches which will produce the best results at minimum prices.

FOR FULL INFORMATION
ADDRESS

CORN PRODUCTS REFINING COMPANY

NEW YORK CITY

Southern Office

GREENVILLE, SOUTH CAROLINA.

LESS SECONDS

Aragon Cotton Mills

Rock Hill, S. C., Apr. 16, 1915.

Steel Heddle Mfg. Co.,
Philadelphia, Pa.,

Dear Sirs:

We have had one-fourth of our mill equipped with your Flat Steel Heddles for nearly one year. We get just as many yards of 80x80 PRINT CLOTH from the steel heddles as we do from the twine harness, and MAKE FEWER YARDS OF SECONDS. I consider it the best harness we can buy. We have just placed the order for the full 560 sets.

Yours truly,

P. B. PARKS, Supt.

The above is a sample of the many testimonials we have received from our customers. If your mill is interested in the question of **Better Quality, Better Production**, and at **Less Cost**, for harness supplies, we have some facts that will interest you.

The highest sleys known to the cotton trade and to the silk trade are made most successfully when our "Duplex" Flat Steel Heddles are used.

Our "Universal" iron-end harness frames, with or without slide hooks, are now generally accepted as the best frames made.

We make steel drop wires in all patterns of the best quality and superior finish. We are specialists in steel wire.

Let us hear from you. A card will bring a call.

STEEL HEDDLE MFG. CO.,

2100-2120 West Allegheny Ave.,

PHILADELPHIA, PA.

HAMPTON SMITH, Southern Agent

GREENVILLE, S. C.

PERSONAL NEWS

C. L. Becknell is now overseer of carding at Victoria Mill No. 1, Rock Hill, S. C.

Tom Leitch has resigned as overseer of spinning at the Gastonia Cotton Mfg. Co., Gastonia, N. C.

J. H. McDowell has resigned as superintendent of the Wadesboro (N. C.) Cotton Mills.

J. T. Knight has been promoted to superintendent of the Wadesboro (N. C.) Cotton Mills.

T. I. Barber has resigned as superintendent of the Riverside and Toxaway Mills, Anderson, S. C.

Chas. Sanderson has resigned as night superintendent of the Lumberton (N. C.) Cotton Mills.

R. E. Norman has been promoted to slasher foreman at the Tom Bigbee Mills, Columbus, Miss.

R. A. Fairchild has resigned as night superintendent at the Stony Point (N. C.) Mfg. Co.

T. J. Hawkins, of Tucapau, S. C., is now second hand in carding at the Brander Mill, Concord, N. C.

F. W. Drury has resigned as slasher foreman at the Tombigbee Mills, Columbus, Miss.

P. H. Dale has been promoted from section hand to second hand in spinning at the Newnan (Ga.) Mills.

Russell Esteep, section hand to second hand in spinning at the Newnan (Ga.) Mills.

Pat Dammond has been promoted to second hand in carding at the Newnan (Ga.) Mills.

Bill Leffner of Cannon Mills No. 2, Kannapolis, N. C., was badly burnt while repairing a motor in the mill.

E. H. Shanklin is now general superintendent of the Victor and Greer Mills at Greer, S. C., and the Apalache Mills, Arlington, S. C.

E. F. Carter, assistant superintendent of the Cannon Mills, Concord, N. C., has been visiting at Kernersville, N. C.

Yancey L. Yon, of Greenville, S. C., has accepted the position of overseer of carding at the Hamilton Carhartt Mills, Rock Hill, S. C.

C. M. Powell, superintendent of the Cabarrus Mills, Kannapolis, N. C., spent Xmas with his mother-in-law at Eatonton, Ga.

J. H. Lytle has resigned as night carder and spinner at the Bloomfield Mfg. Co., to take his former position as night superintendent at the Stony Point (N. C.) Mfg. Co.

H. M. Miles, overseer of carding at Alta Vista (Va.) Cotton Mills, paid us a visit last week while on his way to Rockingham, N. C., to spend Xmas with his mother.

Jas. P. Gossett, president of the Williamston (S. C.) Mills, had a narrow escape when the horse he was riding stumbled and fell upon him and rendered him unconscious for a short time.



ALBANY GREASE

gives perfect lubrication for all kinds of mill machinery. It will not leak or drip from bearings. It is efficient and economical. Write for samples and cup. No charge.

YOUR DEALER SELLS ALBANY GREASE.

ALBANY LUBRICATING COMPANY

708-10 Washington St., New York.

G. G. Allen, overseer of carding at the Gibson Mills, Concord, N. C., was married recently to Miss Anita Walton of Morganton, N. C.

Geo. D. Simpkins, assistant overseer of spinning and twisting at the Manchester (Ga.) Mfg. Co., underwent an operation at Griffin, Ga., for appendicitis, but hopes to be out soon.

J. R. Killian, superintendent of the Cannon Mills, Concord, N. C., spent Xmas in Statesville, N. C., with his wife, who recently underwent an operation in Dr. Long's Sanitorium at that place.

T. A. Sizemore, superintendent of the American Spinning Co., Greenville, S. C., was before a magistrate recently upon a charge of buying deer meat contrary to law, but was acquitted.

Superintendent Tendered Supper to His Workers.

V. M. Johnson, the genial and efficient superintendent of the Carolina Mills, Greenville, S. C., was host to a number of his friends and fellow workers at an enjoyable supper which he gave New Year's night at the Royal restaurant. Among those who enjoyed Mr. Johnson's hospitality were O. C. Williams, C. S. Orr, W. G. Smith, L. P. Loftis, J. C. Page, W. M. Patterson, T. F. Williams, A. J. Mann, F. McFee, G. W. Cisson and E. C. Fletcher, all of whom hold responsible positions in the Carolina Mills.

Make Long Contract With Superintendent.

W. S. Forbes, president of the Edna Cotton Mills, Reidsville, N. C., has recently made a contract with his superintendent, Jno. F. Scott, for his services up to July 1st, 1919, which is three and a half years from this date.

It is unusual for a mill to make more than one year's contract with a superintendent, but Mr. Forbes, who lives at Richmond, Va., has been so well pleased with the operation of the mill since Mr. Scott became superintendent that he desired to insure efficient management for the future and tendered Mr. Scott the contract for the above mentioned period.

Mr. Scott was formerly connected with the Philadelphia Textile School, but has been connected with Southern cotton mills for about twelve years.

NON-FLUID OIL

Has these Especial Advantages over FLUID OILS

It does not drip from bearings or spatter on walls, floors or belting. This saving from waste represents two-thirds reduction in lubricating expense and elimination of damaged goods, mussy floors and rotted belting. It never leaks off leaving the bearings unlubricated and unprotected.

OVER GREASES

NON-FLUID OIL feeds without requiring frictional heat thereby saving power, and decreasing coal consumption. It is not affected by temperature, but retains its "body" in any climate.

Every mill-owner, superintendent and engineer should be interested in NON-FLUID OIL—it means GREATER ECONOMY, EFFICIENCY and CLEANLINESS. Without obligation we furnish free samples for tests in your own mill, under your own conditions. Write us now.

NEW YORK & NEW JERSEY LUBRICANT CO.
165 Broadway, New York.



Cramer System of Air Conditioning

WITH OR WITHOUT

Automatic Regulation of Humidity and Temperature

Moderate in Cost

Cheap to Operate

Yields Big Returns

STUART W. CRAMER

CHARLOTTE,

NORTH CAROLINA

MILL NEWS ITEMS OF INTEREST

Clover, S. C.—No definite action has been taken relative to the new mill for this place, but it is very probable that it will be built.

Gaffney, S. C.—The Globe Manufacturing Company paid a three per cent dividend on its capital stock of \$46,200 on November 1st. This amounted to \$1,386.

Mt. Holly, N. C.—A new yarn mill is proposed for Mt. Holly by C. E. Hutchison and associates. It is very probably that it will be incorporated at an early date.

Anderson, S. C.—The Gluck Mills are paying a semi-annual dividend of three per cent on a capital stock of \$450,000, which amounts to \$13,500.

Red Springs, N. C.—Those interested in a new mill for this place have decided to do nothing at the present time but the mill will probably be organized later in the year.

Kannapolis, N. C.—The Cannon Mill No. 4, which will soon be erected, will contain 21,000 spindles. Contracts for machinery have been placed.

Gastonia, N. C.—The annual meeting of the Modena Cotton Mills will be held on Jan. 17th and will be of much interest on account of the fact that Chas. J. Webb & Co., of Philadelphia recently acquired the controlling interest in the stock.

Albemarle, N. C.—The Efrd Mfg. Co. has placed an order with J. Edw. Lee, Southern representative of the Empire Duplex Gin Co., of New York, for one C. O. B. machine which is to be installed in their picker room at once.

Gaffney, S. C.—The Gaffney Manufacturing Company has paid a two per cent dividend on \$800,000 worth of common stock and three per cent semi-annual on \$175,000 worth of preferred stock, making a total off \$24,250.

The Limestone Mill will pay a semi-annual dividend of six per cent on a capital stock of \$250,000 making \$15,000.

Statesville, N. C.—The Millneer Manufacturing Co., has been incorporated with a capital stock of \$30,000 by T. D. Miller, A. P. Barrow, J. S. Moore, J. G. Shelton, J. W. Kaneer and H. P. Grier. The company will build a cotton mill at this place, this being the formal organization of the company recently mentioned as being formed here to erect a mill.

Gaffney, S. C.—The Hamrick Mill has paid a one and one-half per cent semi-annual dividend on \$247,000 worth of stock, making \$8,645.

Clover, S. C.—Application has been made at Columbia for a charter for a new fancy yarn mill to be established here. The petitioners seeking the charter are John R. Hart, M. L., W. P. and J. M. Smith. The capital is to be \$300,000.

Columbus, Ga.—The Muscogee Manufacturing company is to erect a three-story modern bleachery and dye house, according to reliable information given out Saturday, and the work is to begin at a nearly date.

The residences next to the mill, on Broad street, have been moved to the opposite side of the street, getting lot in readiness for the construction of the new building.

Further information is that the machinery has been purchased, the

transaction taking place a full eighteen months ago, being bought for future delivery. Charles R. Makepeace, of Providence, R. I., mill engineer, was secured to draw the plans of the mill, and it is further understood that the contract for construction is even now let, with plans thoroughly satisfactory and approved.

The amount of money that this investment will call for has not been made public, but it is understood that it will run up into the many thousands.

Wilmington, N. C.—The Wilmington Shirt Company, a new enterprise for this city, has leased the plant of the Willard Bag and Manufacturing Company, and in a short time will begin the manufacture of shirts, its entire output for two years having already been contracted for. More than 50 young women will be given employment. The bag factory has not been in operation for several months. J. C. and B. B. McKoy, Mayor P. Q. Moore and J. H. Scull, Esq., form the company, which is to be incorporated this week. J. C. McKoy will be in charge of the plant, while L. M. Woolard, of Washington, N. C., will be superintendent. The plant will have a capacity of about 1,000 negligees and work shirts daily. The capitalization is \$15,000 with \$5,000 paid in.

Mr. Mill Man! Stop Making Waste
EQUIP YOUR SLASHERS WITH THE
EUREKA SLASHER DEVICE
PAYS FOR ITSELF IN LESS THAN A YEAR
A FEW PROMINENT USERS:

LANCASTER COTTON MILLS.....	Lancaster, S. C.
WARE SHOALS MFG. CO.....	Ware Shoals, S. C.
HENRIETTA MILLS.....	Caroleen, N. C.
PEE DEE MFG. CO.....	Rockingham, N. C.
PELL CITY MFG. CO.....	Pell City, Ala.
PILOT COTTON MILLS CO.....	Raleigh, N. C.
MILLS MANUFACTURING CO.....	Greenville, S. C.
PIEDMONT MFG. CO.....	Piedmont, S. C.
STONEWALL COTTON MILLS.....	Stonewall, Miss.
SHERMAN MFG. CO.....	Sherman, Texas
GIBSON MFG. CO.....	Concord, N. C.
LAUDERDALE COTTON MILLS.....	Meridian, Miss.
GOLDEN BELT MFG. CO.....	Durham, N. C.
PROXIMITY MFG. CO.....	Greensboro, N. C.
ERWIN COTTON MILLS.....	Duke, N. C.

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NEW YORK CITY

At Herald Square, the Radial Center of Transportation to all parts of the city. One block from the Pennsylvania Terminal.

• Surface, Subway and Elevated Service direct to the Hotel, which is in the midst of the fashionable shopping and theatre district.

600 Rooms, Single or en Suite

Single, \$1.50 per day and up.

With bath, \$2.00 per day and up.

Our new popular priced restaurant, an innovation in a leading Broadway hotel.

Write for booklet giving further particulars and map of the city.

WILLARD D. ROCKEFELLER

MANAGER

Spartanburg, S. C.—Dividends of \$300,000 will be issued by Spartanburg city and county banking institutions, cotton mills and miscellaneous enterprises incident to the close of the semi-annual period—July 1 to December 31.—While practically all the dividend paying institutions will make their regular disbursements of earnings, there are others which have been forced to call up the dividend for this period, owing to the slow restoration of normal conditions which became depressed at the outbreak of the European war. Mills producing certain lines of goods, not particularly attractive under prevailing conditions, have had a hard fight, it is stated. They are carrying heavy stocks of goods, however, which will find a market with a change of conditions.

The following is the list of local mills which have definitely decided to issue dividends:

Arcadia Mills, capital \$360,000; 3 1-2 per cent, \$12,600.

Arkwright Mills, capital \$200,000; 3 per cent, \$6,000.

Beaumont Manufacturing company, capital \$319,000; 3 1-2 per cent, \$10,850.

Clifton Manufacturing Company, capital (common stock) \$1,000,000; 3 per cent, \$30,000.

Pacolet Manufacturing Company 3 1-2 per cent, on preferred stock of \$1,720,000, \$60,518.50; 3 per cent on common stock of \$1,000,000; \$30,000; total \$90,518.50.

Spartan Mills, capital \$1,000,000; 4 per cent, \$40,000.

Tucapau Mills, 5 per cent on \$269,000, \$13,450.

Whitney Manufacturing company, capital \$350,000; 3 per cent, \$10,500.

Inman Mills, 3 1-2 per cent on common stock of \$150,000, \$5,250. Inman issued dividend on preferred stock in October.

Reports as to Woodruff Cotton Mills, Fairmont and Saxon have Mills, W. S. Gray Co., Cohannett not been received.

W. H. Shuford Suing A. D. Julliard.

A suit has been commenced in the federal court by Wade H. Shuford, of Hickory, N. C., against A. D. Julliard and company, of New York, in which the plaintiff is seeking to recover \$18,000 alleged to be due him for the sale of individual stock to the Brookford Mills. It is contended that the Julliard's would not buy the stock after they had contracted for it. The property of the Brookford Mills was sold at public auction January 3 to the Julliard Co.

Brookford Mills go to Julliard Co.

The property of the Brook Mills, Inc., Brookford, N. C., was sold under the hammer on Monday by order of the court in a bankruptcy proceedings and brought \$302,296, the price fixed by the court as the lowest bid that would be accepted. The property was bid in by C. W. Tillet, of Charlotte, for the A. D. Julliard Company of New York. The Julliard interests were the only bidders. The four-story mill building, company store, houses for the employees and about 400 acres of land were included in the sale, which was made subject to being confirmed by the court, which will probably take place at once and until the sale is confirmed no formal announcement can be made as to the plans of the new owners. Proceedings were instituted in the state courts last summer by Wade H. Shuford and James A. Martin, of Hickory, with a view to placing the mill in the hands of a receiver, which litigation went on for some time when it was brought to an abrupt end by the mill filing a petition of voluntary bankruptcy with Judge Boyd in the Federal courts. The sale of the property ends all litigation over stock so far as the Brookford Mill Company is concerned. The mill has been running night and day since it was placed in bankruptcy under the direction of H. J. Holbrook, trustee. The new owners will no doubt continue to operate the mill at its present location.

Woodruff Man is Held For Murder.

In accordance with the finding of the coroner's jury, Henry Wooten, of Woodruff, was yesterday placed

in the Spartanburg county jail to await trial charged with the murder of John Starnes, also of Woodruff, who died Friday night as a result of injuries received on Christmas eve night. Both men are well known in that community.

The affair occurred at the store of John Starnes, near Gray Mill. It is declared that both men had been drinking. The men had some words and Starnes ordered Wooten out of the store. It is stated that Starnes drew a knife on Wooten and the latter picked up a plank which lay nearby and struck Starnes a severe blow. Starnes' death Friday night was followed by an inquest under the direction of Coroner Turner.

Report on N. C. Cotton Mills.

The summary of the cotton mill industry in North Carolina for 1915 is just completed by Commissioner of Labor and Printing Shipman and shows 318 mills with \$57,761,232 capital. The mills are equipped with 3,880,217 spindles, 67,218 looms and 9,423 cards; use 187,012 horsepower; the raw material used per annum is 351,050,270 pounds of cotton and the estimated value of the output for the year is \$804,349,78. There are approximately 51,494 persons employed, 31,841 are males and 19,653 females; of the employees about 7,292 are under 16 years of age. The work is on a 10-hour day basis. The commissioner finds that there are about 836 fewer children employed in the mills this year than during the year previous. The motive power is divided with about 80 mills using steam; 73 electricity and the others combining water, steam and electricity.

This report by Commissioner Shipman has been worked out in co-operation with the United States Census Bureau and is much the most complete report the state department has ever issued. The commissioner finds that while the value of the mill products has considerably increased the amount of raw material has decreased, indicating an advance in the grades of goods, and that there is a decided trend toward the use of electricity as the motive power. He finds considerable improvement in the condition of employees.

North Carolina has four cordage mills, according to the report just issued. The aggregate capital is \$808,855 and the four are equipped with 15,936 spindles, 267 braiders, 58 cards and 1,515 horsepower, use about 2,342,176 pounds of raw material and the estimated value of the outfit is \$1,149,396. There are 432 persons employed, 266 males and 166 females, only 15 being under 16 years of age. The mills paid out for wages the past year \$192,506 and an additional \$9,475 classified as salaries.



Six Looms per Operative— Now Eight

In a mill running on plain print goods a weaver ran six looms. After the installation of

THE TURBO HUMIDIFIER

the operative found it possible to run eight—and to run them easier and better than before.

This must mean not only more production, but the production of a better article with a less percentage of seconds.

Any good humidifier will be of efficient service in this direction. The Turbo will prove fully the simplest, easiest way to produce guaranteed humidity.

THE G. M. PARKS CO.

Fitchburg, Mass.

Southern Office Commercial Building, Charlotte, N. C.

J. S. COTHRAN, Manager.

TEXTILE BOOKS

Carding and Spinning, by G. F. Ivey.—Price \$1.00. A practical book on carding and spinning which will be found useful.

Carding Lessons for the Mill Boy—Vaughan—Price \$1.00. A practical carder. Written especially for young carders.

Cotton Mill Processes and Calculations—By D. A. Tompkins—Price \$5.00. An elementary text book for textile schools and self-instruction. Every operation in the ordinary cotton mill is explained simply and with the use of illustrations. Contains much information of value to the experienced man. 395 pages; 33 illustrations; cloth.

Plain Series of Cotton Spinning Calculations—by Cook—\$1.00. A unique and valuable book giving the calculations used in mixing, carding, drawing, and spinning cotton, also original drawings showing points where changes of drafts, speeds, etc., should be made. Setting, production, doublings. 90 pages; freely illustrated; cloth.

CLARK PUBLISHING COMPANY

CHARLOTTE, N. C.

AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. and Treas

THE ONLY PERFECT SYSTEM OF AIR MOISTENING
COMINS SECTIONAL HUMIDIFIER

JOHN HILL, Southern Representative, 1014 Healy Building, ATLANTA, GEORGIA

Cotton Goods Report

New York.—In the primary cotton goods market, buying is steady and the general tone of the market is very strong. Buying is not extremely large, but is steady enough to reach a good total, and is much larger than is usually the case at this time of the year. Sheetings are now in a very firm position, the 40-inch goods being especially scarce, the demand for the bag manufacturers having been large enough to keep a great many of the mills busy for some time to come. The coarse goods suitable for bagging purposes are stronger now than probably any other time in the history of the trade. Print cloths are getting firmer, fine staples are firm and fancy are sold ahead for three months, new deliveries usually beginning in March or April.

Prices on staple piece goods of all kinds are steadily moving up and withdrawal from sale of various lines is becoming more frequent than buyers like. Many more goods are expected to be withdrawn within a short time. The situation on dyed goods of all kinds is becoming more serious every week. Manufacturers making heavy, dark colored cottons have reached the point where it will be impossible for a few of the mills to offer any goods at all for next year. Many lines of denims have been off of the market for some time, and under the present conditions in the dye-stuff end, it is hard to say when manufacturers can take new orders. Where buyers find it necessary to have additional indigo dyed goods, they are getting small lots at an advance of 60 to 70 per cent over the normal prices.

The demand for knit goods for spot and nearby delivery is greater in this market than it has been for years. Retailers have very small stocks, and the jobbing houses have no ordinary surplus on hand. Mills are being pushed for deliveries and they are being asked to supply many of the regular sizes, which in some cases, have been sold out.

It is expected that sales of white goods will be larger this month than has been the case in many years. Demands are being made on the leading white goods houses for any off price goods and for many of the fine staples in lawns, nainsook, linons and other staples, that have not been carried in stock in any large way for several years in some of the retail houses. The stock in the hands of jobbers and agents is not sufficiently large to stand an unusual demand.

Inquiry was good and trading fairly active in the Fall River print cloth market last week. The total sales for the week were about 200,000 pieces. Had the mills been disposed to sell freely, they could have put through the biggest week's business that has been seen in a long time. The prospects of a wage

dispute was reflected in the market by a general stiffening in prices at the end of the week.

The inquiry last week covered a large variety of styles. Buyers appeared more eager to take goods at the present prices, and full market quotations were paid without any haggling.

Prices on cotton goods were quoted in New York as follows:

Print cloth, 28-in., std	3 3-8	—
28-inch, 64x60s	3 1-2	—
Gray goods, 39-inch,		
38 1-2-in, 64x64s	4 3-4	—
4-yard, 80x80s	6 1-8	6 3-4
Brown drills, std.	7 3-4	—
Sheetings, So., std.	7 3-4	8
3-yard, 48x48	7 1-4	—
4-yard, 56x60s	6	—
4-yard, 48x48s	5 1-2	5 5-8
4-yard, 44x40s	5 3-8	—
5-yard, 48x48s	4 3-4	—
Denims, 9-ounce	At value	—
Selkirk, 8-oz., duck	12 1-2	—
Oliver, Extra, 8-oz.	12 1-2	—
Hartford, 11-oz., 40-		
inch duck	15 3-4	—
Woodberry, sail d'k.	20%	—
Mt. Vernon, wide d'k.	27 1/2%	—
Ticking, 8-ounce	13 1-2	—
Standard prints	5 1-2	—
Standard gingham	At value	—
Dress gingham	7 1-2	9 1-2
Kid finished cambrics	4 3-4	5

Hester's Weekly Statement.

(Comparisons are to actual dates, not to close of corresponding weeks.)

	Bales.
In sight for week	378,000
Same seven days last year	578,000
Same date last year	2,698,000
For the season	7,470,000
Same date last year	7,979,000
Port receipts for season	4,154,000
Same date last year	4,799,000
Overland to mills and Can.	
ada for season	576,000
Same date last year	483,000
Southern mill takings for	
season	1,819,000
Same date last year	1,548,000
Interior stocks in excess of	
August 1	921,000
Last year	1,148,000
Year before	792,000
Foreign exports for week	88,000
Same 7 days last year	175,000
For the season	2,314,000
Same date last year	2,482,000
Northern spinners' takings	
and Canada for week	52,000
Same 7 days last year	92,000
For the season	1,329,000

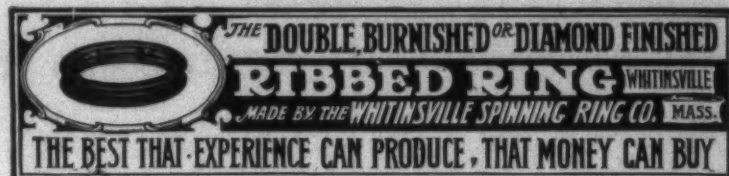
Spinners' Takings.

This week	335,000
Same 7 days last year	332,000

Hester's Visible Supply.

Total visible this week	6,000,000
Last week	5,894,000
Of this the total American	
this week	4,648,000
Last week	4,605,000
Last year	4,657,000

Our Spinning Rings SINGLE OR DOUBLE FLANGE
START EASIEST, RUN SMOOTHEST, WEAR LONGEST
Pawtucket Spinning Ring Co.
CENTRAL FALLS, R. I.



RICHARD A. BLYTHE

(INCORPORATED)

Cotton Yarns Mercerized and Natural

ALL NUMBERS

505-506 Mariner and Merchant Building

PHILADELPHIA, PA.

THE SEYDEL MFG. COMPANY

JERSEY CITY, N. J.



Sizings and Finishings

Soaps and Softeners

FOR ALL TEXTILES.

The Desirability of the South

as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

J. A. PRIDE

General Industrial Agent Seaboard Air Line Railway

NORFOLK, VIRGINIA.

BOSSON & LANE

Manufacturing Chemists

Specialties for the Textile Trade

Works and Office

ATLANTIC, MASS.

The Yarn Market

Philadelphia, Pa.—The last week in the year was a good one in yarn market. December is usually a dull month in the yarn market, but this year it was an exception and sales have been large. Purchasing has been steady and prices have held firmly. Many manufacturers in the East, who bought on the hand to mouth policy for so long, have not yet covered all their needs. When prices went low, they sent in many orders, with the result that prices advanced sharply. One spinner, selling in this market, last week refused an order for 200,000 pounds of yarn for future delivery. He took half the order, and refused the rest, because he expects higher prices later on.

There is a general feeling of optimism in the market here as the new year comes in. Some of the dealers think that 1916 will see a boom in the yarn business. A few think that the higher prices will check buying, but most dealers expressed the view that a temporary check in buying will do little harm, and then buying would be renewed, is the way they look at it. Distributors of textiles have no large supplies on hand. They have been carrying stocks much below normal, and with the increasing demand, it is not thought that distributors can accumulate a normal stock for at least a year.

There were fairly good sales of carded yarns during the week. Inquiry was good, but in many cases sales did not follow because of the price question. Heavy weight carded yarns are in better demand than the light weight, but dealers think the demands for the lighter yarn will improve as the season advances. Manufacturers of light-weight underwear are fairly well covered on their nearby needs, and they will hardly buy in anticipation of future needs until they are satisfied that prices will not go lower.

Fine combed yarns, both single and ply, are still held at high prices and most of the mills are sold through March and April and a few as far ahead as September. Some of the spinners are in a position to give fairly prompt deliveries on these yarns, and are asking their own prices, which are higher than the market. Single combed coarse yarns have shown some improvement, but are still less in demand than the finer numbers, and prices are not relatively as high.

Southern Single Skeins.

4s to 8s	17	-19
10s	19	-20
12s	19 1-2	-20
14s	20 1-2	-21
16s	20 1-2	-21
20s	21 1-2	-22
22s	22 1-2	-23
24s	22 1-2	-23
26s	23	-23 1-2
30s	26	-26 1-2

Southern Two-Ply Skeins.

4s to 8s	18	-19 1-2
10s to 12s	19 1-2	-21
14s	21	-21 1-2
16s	21	-21 1-2
20s	22	-22 1-2
24s	24	-24 1-2
26s	25	-25 1-2
30s	27	-27 1-2
36s	33	-33 1-2
40s	36	-37 1-2
50s	44	-
60s	49	-
3-ply 8s upholstery	19 1-2	-
4-ply 8s upholstery	19 1-2	-

Southern Single Chain Warps.

10s to 12s	20	-21
14s	20 1-2	-21
16s	21 1-2	-
20s	22	-
22s	22 1-2	-
24s	22 1-2	-21 1-2
26s	23	-23 1-2
30s	26	-26 1-2

Southern Single Chain Warps.

10s to 12s	20	-21
14s	20 1-2	-21
16s	21 1-2	-
20s	22	-
22s	22 1-2	-
24s	22 1-2	-21 1-2
26s	23	-23 1-2
30s	26	-26 1-2

Southern Single Chain Warps.

10s to 12s	20	-21
14s	20 1-2	-21
16s	21 1-2	-
20s	22	-
22s	22 1-2	-
24s	23 1-2	-
26s	24	-
30s	26	-26 1-2
40s	35	-

Southern Two-Ply Chain Warps, Etc.

8s to 10s	21	-22
12s to 14s	21 1-2	-22
2-ply 16s	22	-22 1-2
2-ply 20s	23	-23 1-2
2-ply 24s	25 1-2	-
2-ply 26s	26	-
2-ply 30s	28	-28 1-2
2-ply 40s	36	-
2-ply 50s	43	-44
2-ply 60s	50	-

Southern Frame Cones.

8s	19 3-4	-
10s	20 1-4	-
12s	20 3-4	-
14s	21 1-4	-
16s	21 1-2	-
18s	21 3-4	-
20s	21 3-4	-
22s	21 1-2	-22
24s	23	-
26s	24	-24 1-2
28s	24 1-2	-
30s	26	-
40s	33	-

Jacquard Mechanism For Looms.

(Continued from Page 5.)

drawings, it will further be noted that the neck cords 45 are connected respectively to the hooks, namely one neck cord to each hook, and in this construction the neck cord is always maintained under tension and is not subject to the frictional wear which is an incident of a neck cord looped and controlled by two hooks, which is the construction employed in the majority of present-day jacquard machines.

In Fig. 6 we have shown a modified form of upper griff frame wherein 46 designates the frame forming a support for a plurality of V-shaped griffs or knives, so that each V-knife is adapted to govern double the number of hooks controlled by either of the frame parts 15 or 16. In this arrangement one of the frame parts, as 16, may be dispensed with entirely since one side of the V-shaped knife 47 corresponds to a knife on the frame part 16 and takes care of the hooks controlled by the knives 26 of the upper griff frame operated thereby. The use of this frame 46 does not vary or change the operation of our invention but contributes to simplification. In other words, the knives 25 and 26 of the upper griff frame may be in one unitary structure.

In Fig. 4 the line x-x represents the normal level of the warp ends while the line b represents the warp raised by the hooks which are called up, and c the warp ends lowered by the movable grate. This illustrates the formation of the shed opening and as here shown the two sets of warp ends move substantially the same distance, one set being distance a above the level and the other set distance a below the level. Of course, it will be understood that we are not to be limited to this exact proportional movement as obviously the opening may be varied and the relative movements of the griff frame and grate varied.

The operation of the jacquard head is as follows:—As soon as the machine is started the card cylinders 2 and 3 are simultaneously advanced toward the head frame and each presents a card to the respective sets of needles 8. As these cards together determine the hooks which are to be called up for that particular pick of the web, certain of the hooks, normally supported by each of the frames 15 and 16 moving as a unit, will be removed from the path of movement of the griffs or knives, while those remaining will control the lifting of the required warp end.

It will be noted that the aforesaid cylinders 2 and 3 are reciprocated toward and away from the frame 1 through the medium of the cam members 9, which are controlled by the raising and lowering of the arms 11, these latter being actuated by the rocking of the beam 21 and its connections. Since the plunger rod 12 has a fixed connection with the frame 15, and the plunger rod 13 has fixed connection with the frame 16, these two frames, together with the griff knives 25 and 26, will be simultaneously raised and lowered, as a unit and together constituting the upper griff frame, thus bringing up those hooks which re-

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"The Clinchfield Route"

RAILWAY

and
Carolina, Clinchfield & Ohio Railway
of South Carolina.

EFFECTIVE AUGUST 9, 1915.

Eastern Standard Time

Southbound

Lv. Elkhorn City, Ky.	3:00
Lv. Haysi, Va.	3:37
Lv. Fremont, Va.	4:10
Lv. Dante, Va.	4:55 *8:30
Lv. St. Paul, Va.	5:30 8:52
Lv. Speer's Ferry, Va.	7:25 10:17
Lv. Johnson City, Tenn.	9:30 11:45
Ar. Erwin, Tenn.	*10:30 *12:25
Lv. Erwin, Tenn.	5:00 *12:35
Lv. Kona, N. C.	7:18 2:04
Lv. Altapass, N. C.	8:10 2:45
Lv. Marion, N. C.	9:50 3:55
Lv. Bostic, N. C.	11:33 4:57
Ar. Spartanburg, S. C.	1:30 *6:05

Northbound

Lv. Spartanburg, S. C.	4:50 *11:00
Lv. Bostic, N. C.	6:09 12:10
Lv. Marion, N. C.	7:05 1:05
Lv. Altapass, N. C.	8:20 2:20
Lv. Kona, N. C.	8:57 3:03
Ar. Erwin, Tenn.	*10:30 *4:30
Lv. Erwin, Tenn.	*7:45 *4:35
Lv. Johnson City, Tenn.	8:30 5:15
Lv. Speer's Ferry, Va.	10:35 7:02
Lv. St. Paul, Va.	12:17 8:30
Lv. Dante, Va.	12:40 *8:50
Lv. Fremont, Va.	1:25
Lv. Haysi, Va.	1:55
Ar. Elkhorn City, Ky.	*2:30

*—Daily.

A. M. light face type.

P. M. heavy face type.

Patrons are requested to apply to nearest agent for definite information, or to

CHAS. T. MANDEL,
Asst. Gen'l Pass. Agent.

J. J. CAMPION,
V.-Pres. and Traffic Mgr.,
John City, Tenn.

main in the path of the knives, as will be apparent. The reciprocation of the beam 21 in the present instance is also utilized to reciprocate the grate or auxiliary griff frame 29 in such a manner that those hooks 27 which have been removed from the knives are lowered with the grate or auxiliary griff frame 20 at the same time that the upper griff frame structure raises the hooks called up by the cards. The result of this movement is to raise certain of the warp ends and lower the remaining warp ends so that the shed opening is formed of the required size but without undue tension upon the raised ends. In other words the tension upon the warp is equalized and the tendency of the ends to break during the operation of the loom is lessened to such an extent as to be practically negligible. In fact it has been found in practice in the operation of our invention, that the breakage of warp ends is such an inconsiderable factor as to greatly increase the number of looms which can be taken care of by a single operator.

A further and very important feature of our invention resides in utilizing a tie-up for the harness wherein each hook independently controls its neck cord, in consequence of which the wear upon the neck cords is substantially uniform, so that the level of the warp, having been once established initially, remains practically constant throughout the operation of the loom. The resulting product is, therefore, finer in quality, texture and appearance.

(Continued on Next Page).

Development of Weaving Machinery

The growth of the textile business in America in the past ten **Growth** or fifteen years of has been due **Textiles** primarily to the improvement in weaving machinery.

There is hardly a successful cotton weaving mill in America

Automatic today **Looms** which has **Universal** not been equipped

almost entirely with automatic looms. The economy of this machinery is self-evident and permanent.

There is not a plain cotton loom in existence today in which the single shuttle is used which cannot be made fully automatic at approximately one-third of the cost of other automatic looms. The patents for these changes are controlled by us and we would be very happy to show you how much money we can save you by this small expenditure.

It will pay you to investigate.

Hopedale Mfg. Co.
Milford, Mass.

Personal Items

C. M. Hutcheson promoted from loom fixer to second hand of weaving at Edna Cotton Mills, Reidsville, N. C.

T. E. Raht, who recently resigned as superintendent of the Swift Spinning Mill, Columbus, Ga., has accepted a position with Bibb Mfg. Co., Macon, Ga.

J. H. Garrett has resigned as overseer of carding at the Selma (Ala.) Mfg. Co., to accept a similar position at the Prendergast (Tenn.) Cotton Mills.

C. B. Harris, second hand in weave room Edna Cotton Mills, Reidsville, N. C., has resigned and accepted position with erecting force of the Stafford Loom Co.

Smoke Stacks Blew Down.

During a severe rain and wind storm, Friday night before Christmas, the two old smoke stacks were blown down at the Fulton Cotton Mills, Athens, Ga., taking with them the new stack which had just been set up the day before. The new stack was 100 feet high, and 50 feet in diameter, and was for the new 500 H. P. boilers. This caused the mill to stand all the week but it will begin operation Jan. 6th as the new stack has been erected and all the connections made to the engine. The mill has very profitable orders for two months ahead and this causes some delay in delivery.

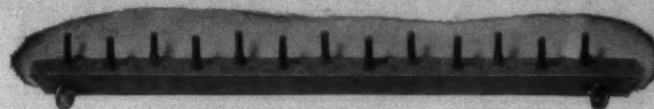
Jacquard Mechanism For Looms. (Continued from Page 15.)

and entirely free from defective portions caused in the ordinary loom by differences in the level of the warp. These differences in the level, it will be understood, are caused by the unequal stretching of new neck cords with respect to those which have been in use for some time. In our present invention, therefore, it will be apparent that the harness is all practically the same age as distinguished from repaired harness which has new neck cords in place of those worn out by looping and friction.

It will further be apparent by employing our present tie-up with the harness of each hook passing through holes in the same longitudinal row of comb board, that it is possible to employ all cards interchangeably without rearranging or changing the tie-up with its consequent loss of time.

It will now be apparent that we have devised a novel and useful construction which embodies the features of advantage enumerated as desirable, and while we have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that we do not restrict ourselves to the details, as the same are susceptible to modification in various particulars without departing from the spirit or scope of the invention.

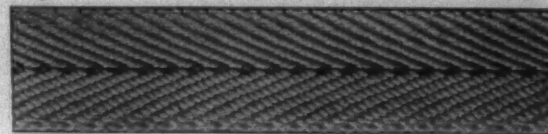
ONCE TRIED — ALWAYS USED



RICE DOBBY CHAIN AND PEGS
RICE DOBBY CHAIN CO., Millbury, Mass.

AMERICAN TEXTILE BANDING CO., Inc.

Manufacturers of
Spindle Tape
And
Bandings



Third and Moore Street, PHILADELPHIA, PA.

Norwood Mechanical Filters

Gravity and Pressure Types

Cleanse Water—Saves Losses—Sold with Guarantee
NORWOOD ENGINEERING COMPANY
Florence, Mass.

Emmons Loom Harness Company

The Largest Manufacturers of Loom Harness and Reeds in America

Loom Harness and Reeds

Slasher and Striking Combs, Warper and Leice Reeds, Beam-
er and Dresser Hecks, Mending Eyes, Jacquard Heddles.
LAWRENCE, MASS.

SCOTCH SIZE OR KLEISTER



Reg. U. S. Pat. Off.

This is an old preparation well known to the majority of Cotton Manufacturers, on account of the general satisfaction it has always given. A binder for both fine and coarse counts as it combines readily with any starches on the yarn. Manufacturers of exports and denims find it valuable, as it reduces shedding and loom waste to a minimum. Should use Raw Tallow or Soluble Tallow in addition. Write for formula.



Reg. U. S. Pat. Off.

ARABOL MANUFACTURING COMPANY
100 William Street, New York
CAMERON MacRAE Southern Sales Agent CHARLOTTE, N. C.

PROPER LOCATIONS FOR MILLS.

United States Census figures show that since 1880 the consumption of cotton in mills of the cotton growing States has increased 1,502 per cent, as compared with an increase of only 98 per cent in all other states. In the twelve months ended August 31, 1914 Southern mills consumed 162,097 more bales of cotton than the mills of all other States. Three-fourths, or 9,000,000, of the total cotton spindles in the cotton growing States are tributary to Southern Railway tracks. Of the 200 knitting mills in the South over 125 are located along the Southern Railway. Nearly all the Southern woolen and silk mills are also on Southern Railway tracks.

There is a reason for this, and it is not difficult to understand.

The Southern Railway Lines enter and serve most completely those portions of the South where the textile industry is the greatest success, because there are found all the conditions which makes for successful manufacture—the proper transportation facilities, the ease with which the raw material and the needed fuel may be secured, the supply of good labor, the pure water, the low cost of power, and favorable local conditions.

Not only for textile plants but for all other industries the best advantages will be found in this territory.

If you have a plant to locate, let us take up with you the question of the proper location. Your plans will be held confidential. Our knowledge of conditions at various points and our experience in locating other mills and the time of our agents in making special investigations are at your service if desired.

M. V. & RICHARDS, Industrial and Agricultural Commissioner,
Southern Railway,
Room 129, Washington, D. C.

Want Department

Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell the want columns of the **Southern Textile Bulletin** afford the best medium for advertising the fact.

Advertisements placed with us reach all the mills and show results.

Employment Bureau.

The Employment Bureau is a feature of the **Southern Textile Bulletin** and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable free is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

For Sale.

Three Fales & Jenks dry twist-ers, warp wind, 223 spindles each, 1 3-4 inch rings. In good condition; a bargain.

Banna Manufacturing Co.,
Goldville, S. C.

For Sale.

Shafting, Sprinkler System and Heating System.

Fore Sale, shafting, sprinkler system and heating system from small mill that is being dismantled. All are in good condition. Have also equipment of pulleys. Address Shafting, care Southern Textile Bulletin.

Wanted.

A full set of hands for night work in yarn mill, consisting of spoolers, spinners, doffers, card room and twister room hands. Good wages, healthful location. Apply immediately to J. T. Knight, Supt., Wadesboro Cotton Mills Co., Wadesboro, N. C.

SALESMAN WANTED

First-class salesman who is personally acquainted with the cotton mill trade in North Carolina and South Carolina to handle, as a side line, our Special Comb Box and Loom Lubricants of exceptionally high quality. In replying state what territory you are covering, giving reference.

REED OIL COMPANY,
Atlanta, Ga.

Wanted.

4 or 5 winder hands, picker hands, drawing hands and one spinner, all for night work. C. C. Randleman, Supt. Weldon Cotton Mfg. Co., Weldon, N. C.

Wanted.

First-class superintendent to start up small mill on men's union suits. References required. Southern man preferred. Address "A," care Southern Textile Bulletin.

Commercial Photographs.

Photos made any where any time, 10 N. Cedar St., Charlotte, N. C.
Mrs.—THE MOONS—W. J.

Second Hand Wanted.

Second hand for a 15,000 spindle mill spinning room on high-grade hosiery yarns. Pay \$10.50 per week. Two section hands an an oiler on job with you. Good chance for promotion, if you prove yourself to be a good man. Healthy city, not many miles from Charlotte, N. C. Must give best of reference in regard to character and ability. Address Second Hand, care Southern Textile Bulletin.

WANT position as superintendent. Have long experience. Am now employed and always gave satisfaction. Reason for changing is better salary. Age 45. Married. Strictly sober. Experienced from ground up on both white and colored work. Address No. 1300.

WANT position as overseer of large ner in small mill. 40 years old, sober, good manager of help and best of references. Getting results is a habit with me. Address No. 1301.

WANT position as carder or spinner or both. Age 45. Married. Strictly sober. Have 20 years experience. Address No. 1302.

WANT position as a-sistant superintendent or overseer. Now employed, but would change for larger job. Address No. 1304.

WANT position as superintendent of yarn mill or overseer of spinning in a large mill. At present am superintendent. Very wide experience. References from past and present employers. Address No. 1303.

WANT position as superintendent. Have had long experience and have run some of the best mills in the South. Have always made money for my mills. Satisfactory references. Address No. 1305.

WANT position as superintendent or overseer of spinning. Have been on present job three years and am giving satisfaction, but want location where there are better schools. Present employer as my reference. Address No. 1306.

WANT position as overseer of spinning. Best of references as to character and ability as a spinner. Now employed but desire to change. Address No. 1307.

WANT position as superintendent or overseer of spinning. Am a practical man 40 years old. Married. Strictly sober. Experienced from picker to cloth room on white or colored goods. Can furnish good references as to ability and character. Address No. 1308.

WANT position as superintendent. Am an Eastern man of long experience but desire to move to the South. Can furnish the best class of references. Address No. 1309.

WANT position as overseer of carding or as superintendent. Have 20 years experience in mill. 9 years as second hand and overseer of carding. Age 38. Married. Sober. Now employed. Good references. Address No. 1310.

WANT position as overseer of spinning and winding. Have 12 years experience as overseer. Age 35. Strictly sober. Good manager of help. Now employed. Good references. Address No. 1311.

WANT position as overseer of weaving on Draper or plain looms. Now employed as second hand. Age 32. Married. Good manager of help. Hustler for production. Address No. 1312.

WANT position as overseer of cloth room, 10 years experience. 35 years old and married and strictly temperate. Am now employed but desire to make a change. Best of references. Address No. 1313.

WANT position as superintendent or as carder and spinner. Have had long experience in large mills and furnish best of references. Address No. 1314.

WANT position as overseer of spinning or weaving, either plain or fancy. Long experience. Now employed. Can furnish fine reference. Address No. 1315.

POSITION WANTED as superintendent, by practical man of executive ability. Fully capable of managing mill. 8 years as overseer of weaving in largest mill in S. C. 3 years experience as su-

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Difficult and rejected cases specially solicited. No misleading inducements made to secure business. Over thirty years active practice. Experienced, personal, conscientious service.

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Patent Lawyers

Suite 34 N. U. Washington, D. C.

perintendent. Now employee as superintendent. Can give present and all former employers as reference. Address No. 1316.

WANT position as superintendent or carder or spinner. Now employed, but prefer to change. Have long experience and can furnish best of references. Address No. 1317.

WANT position as superintendent of yarn mill or carder. Long practical experience on all classes of yarn from 4s to 180s. Also experienced on automobile tire fabrics. Address No. 1318.

WANT position as book-keeper. Am capable, experienced young man of good habits and character. Am now employed as mill book-keeper, but desire to change for good reasons. Address No. 1319.

WANT position as superintendent or overseer of carding. Have had long experience as carder in large mills and can furnish lost employer as reference. Address No. 1320.

WANT position as superintendent or overseer of weaving. Held one position seven years and can give all former employers as references. Address No. 1321.

WANT position as overseer of large card room or superintendent of small mill. Now employed as carder. Am experienced on white, colored and combed yarns. Married. Age 32. Best of references. Address No. 1322.

WANT position as superintendent or overseer of either carding or spinning. Have had 12 years experience as carder and spinner and 12 years as superintendent, including several large mills. Can furnish best of references. Address No. 1323.

WANT position as superintendent. Have been superintendent of large mills and can furnish best of references both as to character and ability. Address No. 1324.

WANT position as overseer of carding. Age 35. Married. Have had 15 years experience as second hand and overseer in Eastern mills. Fine references. Address No. 1325.

WANT position as timekeeper, general office-man, and outside overseer. 10 years experience as railroad agent. 2 years mill experience. Married. Good references, both as to character and ability. Address 1326.

WANT position as superintendent or overseer of weaving. Am at present employed in Eastern mill on cotton and silk goods and have charge of 2,100 looms. Experienced on lenos, fancies, box work, jacquard and Draper looms. Fine references. Address No. 1327.

WANT position as superintendent of large card room or spinning room. Am now employed. Have had long experience and can furnish the very best of references. Address No. 1328.

WANT position as overseer of carding. Have had 22 years experience in card room and am entirely competent. Can furnish best of references. Address No. 1329.

WANT position as superintendent. Now employed, but for good reasons would prefer to change. Have had long experience and can furnish best of references. Address No. 1330.

WANT position as overseer of weaving. Experienced on Draper and Stafford looms as well as fancy work. Can furnish best of references from both former and present employers. Address No. 1331.

WANT position as superintendent of small mill or overseer carding and spinning. Thoroughly practical, experienced. Can give good references. Address No. 1332.

WANT position as superintendent of weaving or yarn mill of not less than 15,000 spindles. Now employed as superintendent, but want larger mill. Fine references. Address No. 1233.

WANTED position as overseer of carding, at not less than \$2.50 per day. Am a practical carder, good manager of help, strictly sober. Have had about ten years as carder. Am now employed and giving satisfaction. Good reason for changing. Can come on reasonable notice. Address No. 1334.

WANT position as superintendent. Prefer a yarn mill. Have had long experience and can furnish the best of references from former employers. Address No. 1335.

WANT position as overseer of spinning, at not less than \$3.50 per day. Have 20 years experience in mill work and am now employed but prefer to change. Address No. 1336.

WANT position as superintendent, or overseer of large card room. Am giving satisfaction on present job, but want larger salary. Have good education and am good manager of help. Five years experience as machinery erector. Sober. Good references. Address No. 1337.

WANT to buy a small block of stock in a medium or small size mill that can give me permanent position as superintendent, and can work out part of purchase price. Will consider new mill or reorganization proposition. Address No. 1338.

WANT position as overseer of carding or spinning. Am now employed and giving satisfaction, but prefer different class of work. Can furnish best of references. Address No. 1339.

WANT position as superintendent or overseer of large card room. Have had long experience in both positions and can furnish best of references. Address No. 1340.

WANT position as overseer carding or spinning in good mill in N. C., S. C., or Ga., at not less than \$3.00 per day. Age 38. Married. Best of references from present and former employers. Can change on short notice. Address No. 1341.

WANT position as overseer of carding. 12 years experience as second hand. 2 years as overseer. Can furnish best of references. Address No. 1342.

WANT position as superintendent of cotton waste mill or woolen mill. Have had special experience handling waste on the woolen system and can furnish best of references. Address No. 1344.

WANT position as overseer of spinning by a married man, 39 years of age. Have had twenty years experience on twisted and hosiery yarns, white and colored. Strictly sober. In good health. Now employed, but wish to change. Can give good references. Could call to see you in person. Address No. 1345.

WANT position as master mechanic. Have had 6 years experience as mill master mechanic and can furnish good references. Address No. 1347.

WANT position as overseer of spinning. Am a practical spinner. Age 25. Married. Now employed and can furnish best of references. Address No. 1346.

WANT position as overseer of spinning in small mill or second hand in large mill. Age 39. Have had 27 years' experience in spinning and twisting. Prefer mill in small place. Good references. Address 1349.

WANT position as overseer of weaving. Plain or Draper looms. Am experienced on drills, ducks osnaburgs and sheetings. Can give good references as to character and ability. Address No. 1350.

WANT position as overseer of carding or as second hand. Am an expert card grinder and have had long experience as second hand. Good references. Address No. 1351.

WANT position as superintendent. Am now employed as superintendent, but desire larger mill. Have had long experience and can furnish best of references. Address No. 1352.

WANT position as second hand in spinning or overseer of small room. Age 24. Married. Strictly sober. Have had 11 years experience in spinning room and can get production. Address No. 1353.

WANT position as overseer of spinning. Have 25 years experience in mill. 12 years as overseer. Married. Sober. Good references. Address No. 1354.

WANT position as superintendent or overseer of weaving. Now employed, but for good reasons prefer to change. Have had long experience and can furnish satisfactory references. Address No. 1355.

WANT position as superintendent. Prefer mill on hosiery yarns, carded or combed. Now employed. Can give references from best mill men in the country relative to my ability. Address No. 1356.

WANT position as superintendent of a cloth mill or overseer of large weave room. Good references. Long experience. Can change on short notice. Address No. 1357.

WANT position as superintendent of either yarn or weaving mill. Employed at present and only reason for changing is to better myself. Long experience, and can give good references. Address No. 1358.

WANT position as superintendent. Have had long experience and can furnish good references. Address No. 1359.

WANT position as overseer of weaving. Long experience and can give references from present and past employers. Address No. 1360.

WANT position as overseer spinning spooling and winding. A married man 24 years of age. Have had long experience as overseer and can change on two weeks notice. Experienced on both white and colored work from 1s to 40s. Would not care to change for less than \$3.00 per day. Address No. 1361.

WANT position as superintendent of a large mill, or general manager and superintendent. 43 years of age, strictly temperate. 23 years experience. Know how to manage all departments of a mill. Only reason for changing is larger salary. Address No. 1263.

WANT position as overseer of spinning. A married man of good character and sober habits. Am now employed. Can furnish the best of references. Address No. 1364.

WANT position as overseer of spinning. Have had long experience and have always made good. Can furnish former employers as reference. Address No. 1295.

WANT position as overseer spinning. Am graduate in designing. Have had 18 years experience as overseer weaving. Can furnish best of references. Address No. 1366.

WANT position as overseer of weaving or carding and spinning. Have had 18 years experience. Understand combed work. Can furnish excellent references. Age 40. Married. Address No. 1367.

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WANT position as overseer spinning or second hand in large room. Have had 20 years experience. Strictly sober and business at all times. Prefer a job that needs bringing out of a hole. Can furnish good references. Address No. 1368.

WANT position as overseer spinning or carding and spinning. Long experience. Now employed. Good references. Will not consider less than \$2.50 per day. Address No. 1369.

WANT position as superintendent, overseer weaving or cloth room. Can run either one and can give good references both as to character and ability. Address No. 1371.

WANT position as superintendent or overseer of carding or spinning. Can furnish present and former employers as references. Only reason for changing is that I want larger job. Address No. 1372.

POSITION as superintendent wanted by a practical mill man. Have had 14 years experience as superintendent and thoroughly understand all details connected with the manufacturing of cotton goods. Can give A-1 references as to ability and character. Address o. 1376.

Charles had been instructed to clean the back yard, and when his father inspected it that night it was in perfect condition. The following evening, however, it looked worse than ever.

"How is this, son?" asked his parent. "Yesterday you cleaned the yard finely, but today it is awful."

"Gee whiz! It ain't my fault," explained Charles indignantly. "I fired everything over the fence next door, but today that fresh kid that lives there fired 'em all back again and a lot more besides."—Ex.

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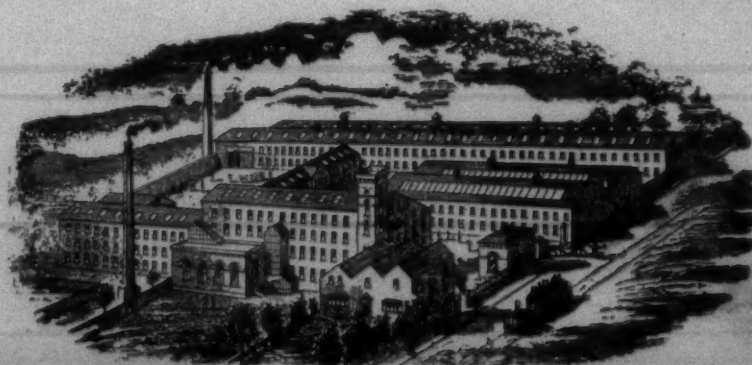
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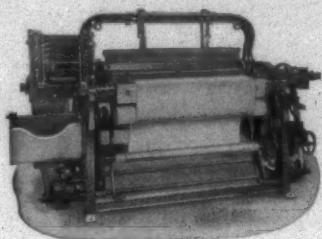
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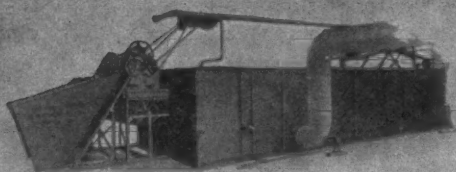
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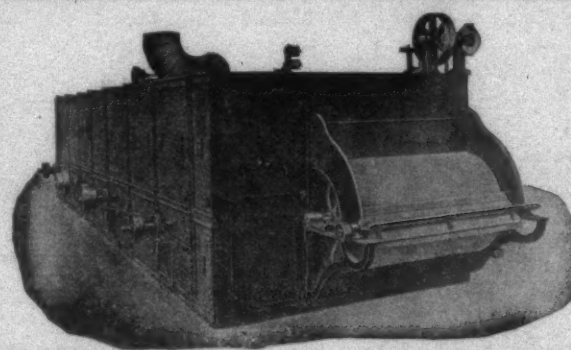
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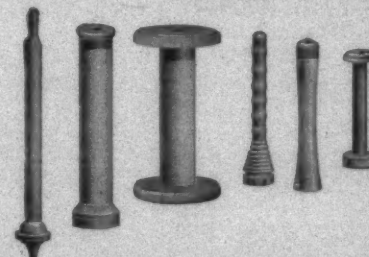
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